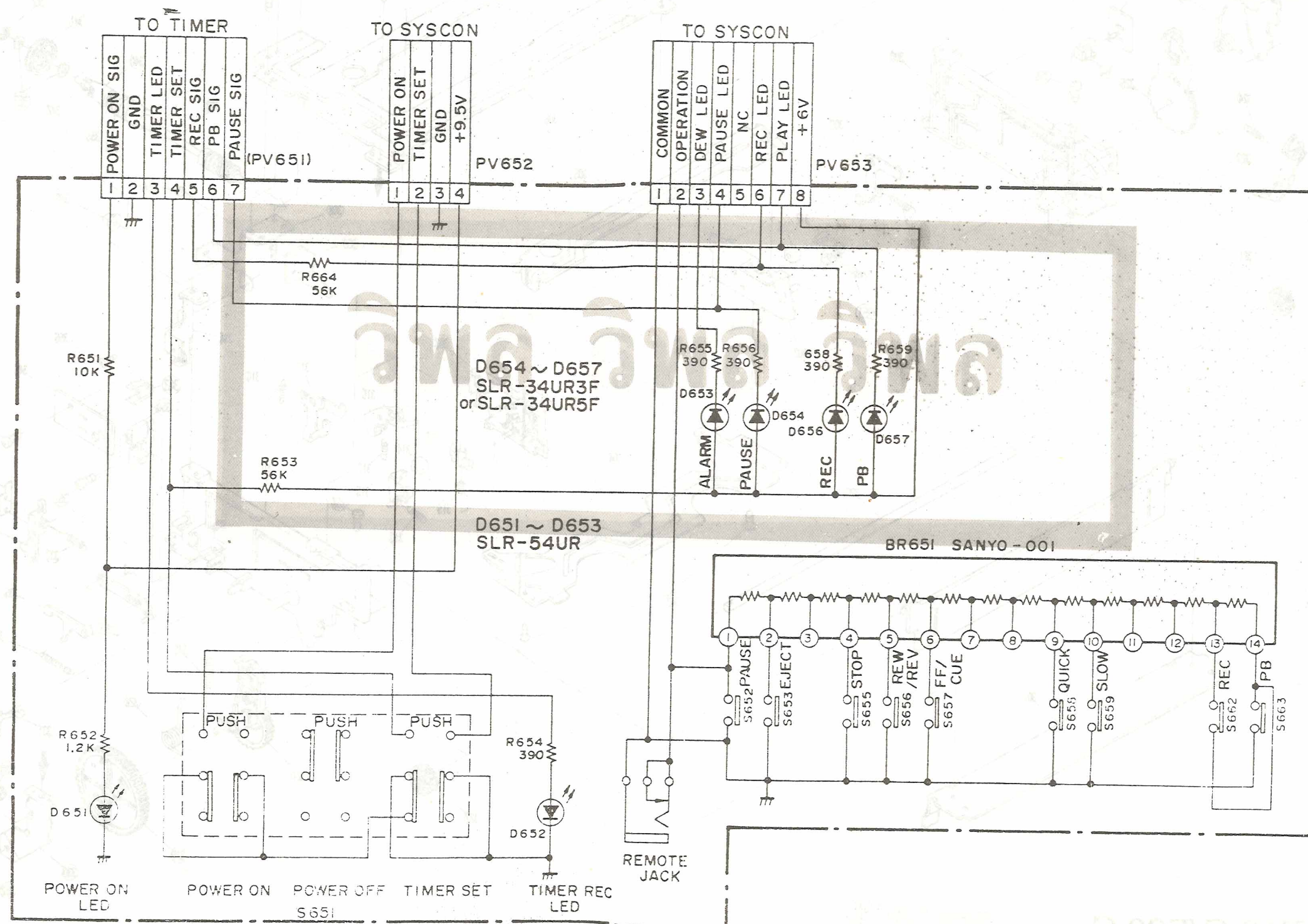
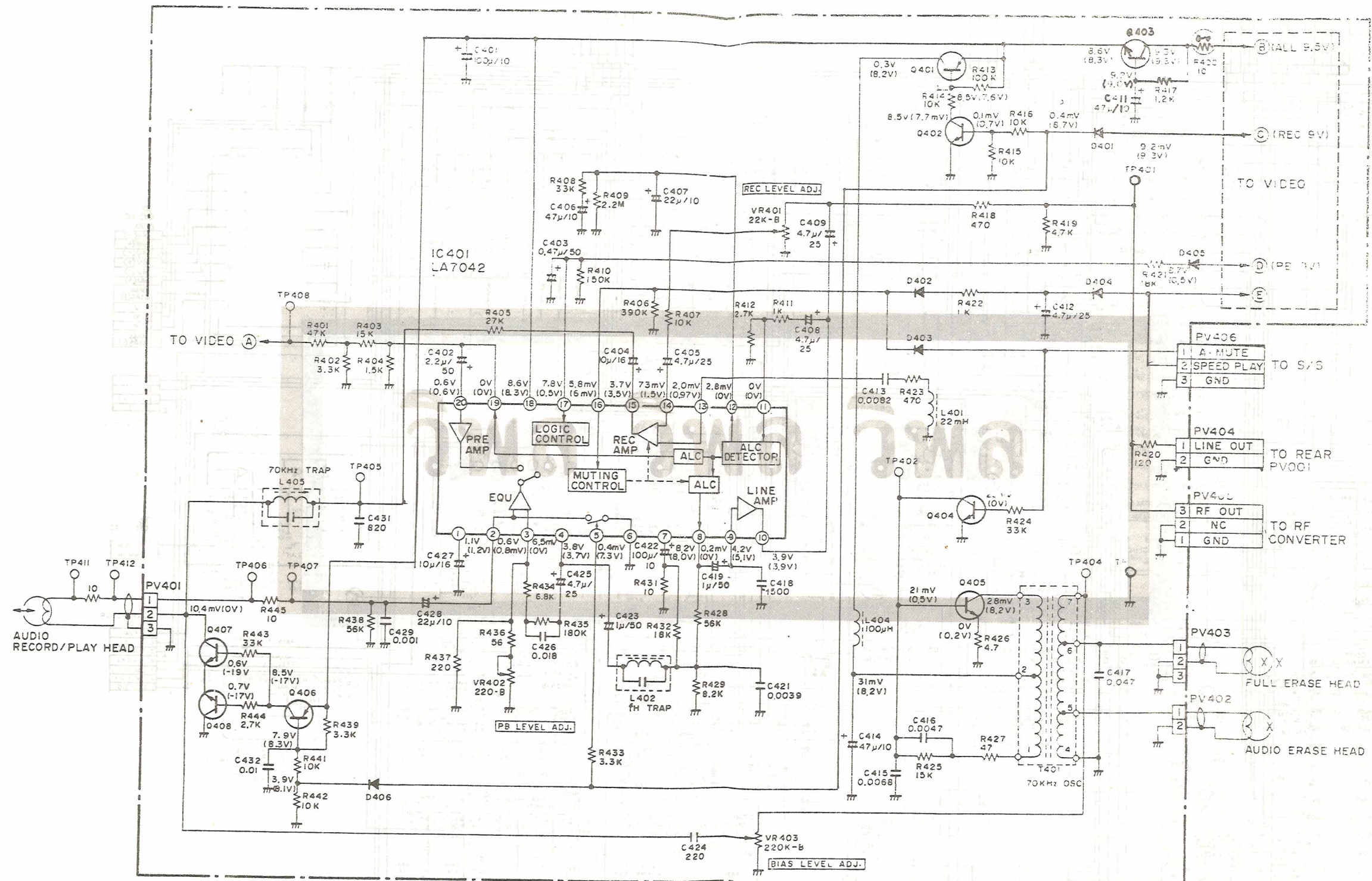






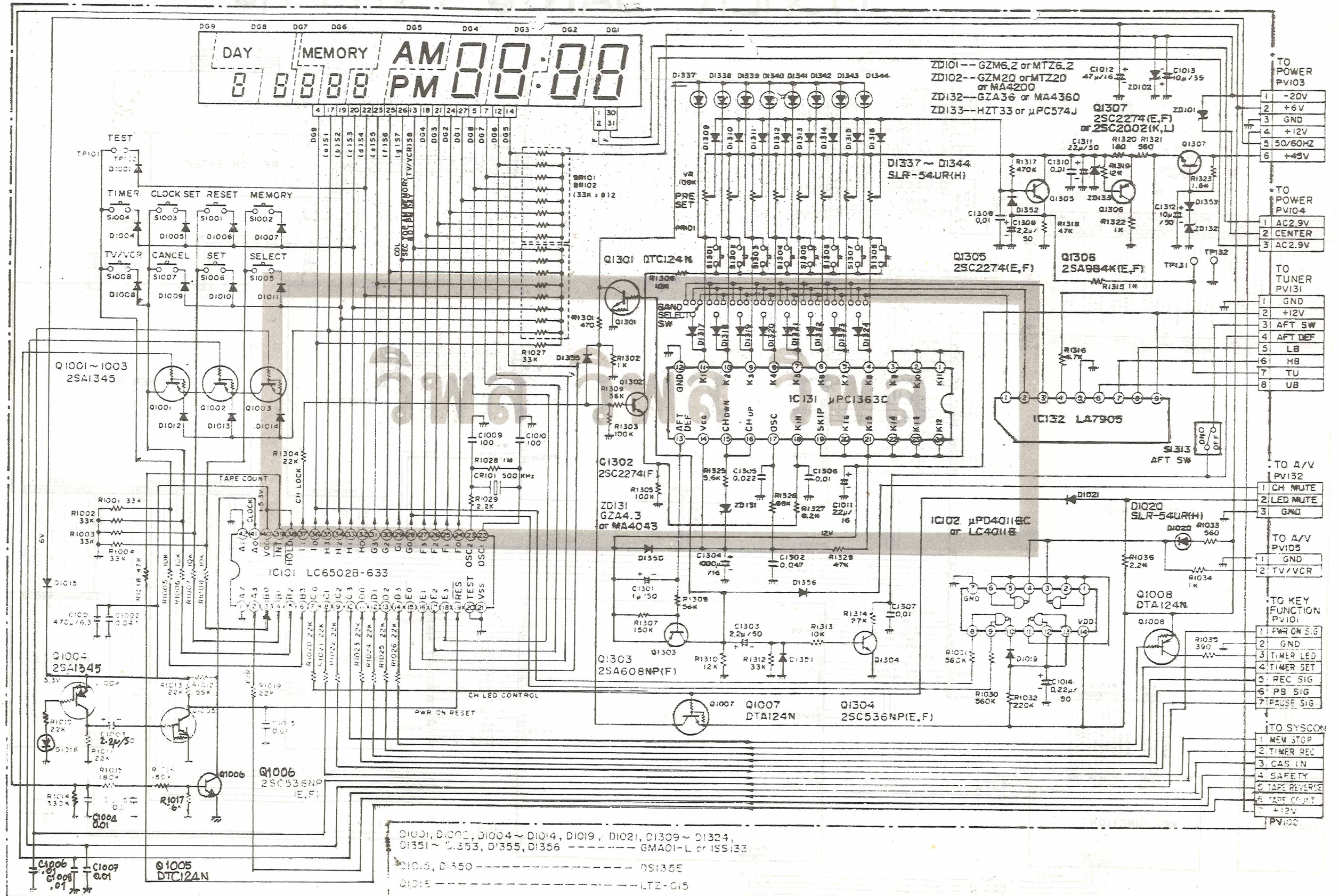
- Q401 ----- 2SA608SP (F, G)
 Q402, Q404 --- 2SC536SP (F, G) or 2SC945 (K, P)
 Q403, Q405 --- 2SD734 (F, G)
 Q406 ----- 2SA1016 (F, G)
 Q407, Q408 --- 2SC1845

D401 ~ D406 --- ISS133 or GMA01-L

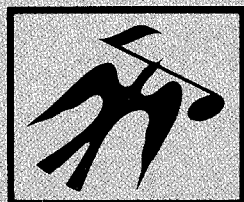
All voltage are in PLAY mode unless otherwise noted.
 () --- RECORD mode

TIMER CIRCUIT DIAGRAM

FVH-P620 V



SERVICE MANUAL



FISHER

FVH-P615

(EUROPE)

VIDEO CASSETTE RECORDER
PARTS LIST & SCHEMATIC DIAGRAM



SPECIFICATIONS

General Specifications		Camera remote pause	2.5 mm jack
Television system	PAL standard color (System B & G) & CCIR monochrome signals 625 lines	Remote	3.5 mm jack
Recording system	Rotary two-head helical scan system	Electrical Specifications	
Format	VHS PAL standard	Video output level	1 Vp-p
Tape width	12.7 mm	Video output impedance	75 ohms
Tape speed	23.39 mm/sec.	Audio output level	-6 dB
Recording time	240 minutes with E-240 cassette	Audio output impedance	600 ohms
Tape loading system	Automatic loading	Video input level	0.5-2.0 Vp-p
Tuner channel selection system	Soft touch, 12 channels	Video input impedance	75 ohms
Tuner channels	VHF: #2-#12 UHF: #21-#69	Audio input level	-20 dB
RF converter output	UHF channel 36 (30-39 adjustable)	Audio input impedance	50 kohms
Time indication	24-hour display system	Video S/N ratio	43 dB
Timer	9-days, 1 programme	Audio S/N ratio	42 dB
Tape counter	Separate 4-digit electronic display	Audio bandwidth	50 Hz-10kHz
Auto rewind system	Activated at end of tape when FUNCTION ON switch is pressed	Horizontal Resolution	Colour 240 lines
Terminals		Other Specifications	
Aerial input	DIN (socket)	Power requirement	220 V, 50 Hz
RF output	DIN (plug)	Power consumption	36 Watts
Video input/output	BNC connector	Dimensions	440 mm(W)X125 mm(H)X330 mm(D)
Audio input/output	RCA connector	Weight	7.5 Kg (Approximate)

Because its products are subject to continuous improvement, FISHER CORPORATION reserves the right to modify product designs and specifications without notice and without incurring any obligation.

PARTS LIST

PRODUCT SAFETY NOTICE

The components designated by a symbol (Δ) in this schematic diagram designates components whose value are of special significance to product safety. Should any component designated by a symbol need to be replaced, use only the part designated in the Parts List.

Do not deviate from the resistance, wattage and voltage ratings shown.

ACCESSORIES

Ref No	Part No.	Description
	143-6-2704-13200	FAN BAG ASSY(Plastic Bag)
	4-1924-00260	WIRED REMOTE CONTROL
	4-2394-00030	CONNECTOR CABLE
	4-2414-00040	CASSETTE TAPE
	143-6-2704-13300	FAN BAG ASSY(Plastic Bag)
	143-6-2714-00200	ENVELOPE
	143-6-4114-08500	INSTRUCTION MANUAL
	143-6-4124-03900	INSTRUCTION CARD
	143-6-4514-00900	WARRANTY CARD
	143-2-1954-02803	LABEL TIMER-HAB-D
	143-2-1954-03605	LABEL PRESET-HAB-F

PACKING MATERIALS

Ref No	Part No.	Description
	143-6-1424-00600	IND. CORR CARTON CTN-FEUP615
	143-6-1464-00200	ACCESSORY CASE-HAA
	143-6-2514-00100	IND. POLY COVER-HV01
	143-6-3114-00700	RIGHT INNER CUSHION-HAB
	143-6-3114-00800	LEFT INNER CUSHION-HAB
	143-6-3234-00200	PROTECTIVE SHEET-HV01-B
	143-6-3244-00100	PLUG CAP-HV01

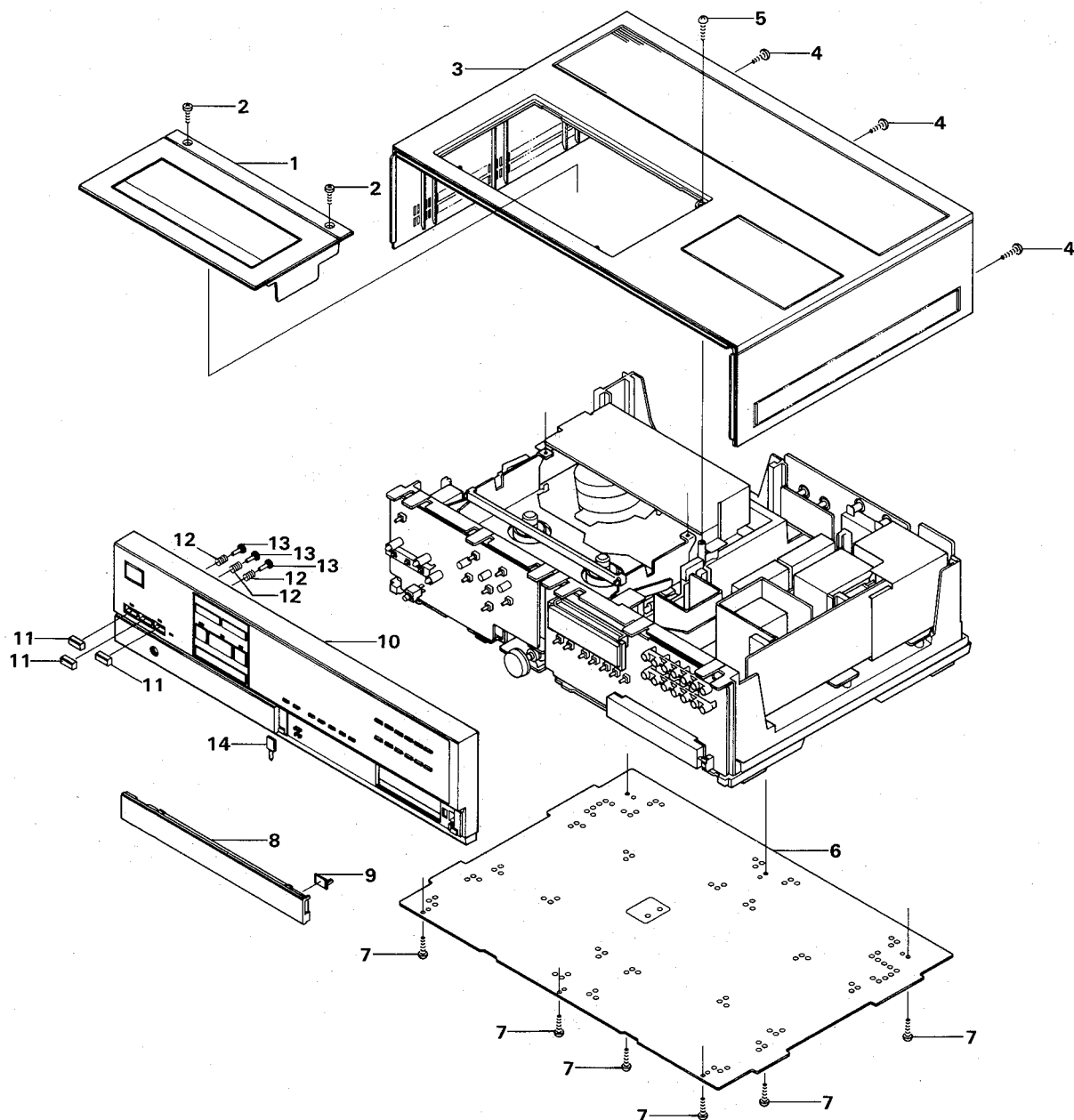
NOTE: Parts order must contain Model Number, Part Number and Description.

CABINET PARTS (1)

Ref No	Part No.	Description
1	143-0-1404-00200	Lid Cassette Assy-HAB
2	101-3-1703-00814	Screw, Bind Hd Machine +M3×8
3	143-0-1204-00300	Cabinet Top Assy-HAB
4	103-3-1904-01211	Screw, Brazier Hd Tapping S-Tite +M4×12
5	103-3-1903-01211	Screw, Brazier Hd Tapping S-Tite +M3×12
6	143-0-1354-00200	Bottom Cover Assy-HAB
7	103-3-1903-01218	Screw, Brazier Hd Tapping S-Tite

Ref No	Part No.	Description
8	143-0-1454-00400	Door, Preset Assy-HAB
9	143-2-6104-02300	Slide, AFT Switch-HAB
10	143-0-1104-00600	Cabinet Front Assy-HAB
11	143-2-1704-06100	Button, Power-HAB
12	143-2-6704-02100	Spring, Button-HAB
13	143-2-1704-06200	Flange, Button-HAB
14	143-2-5804-02100	Driver-A

NOTE: Parts order must contain Model Number, Part Number and Description.

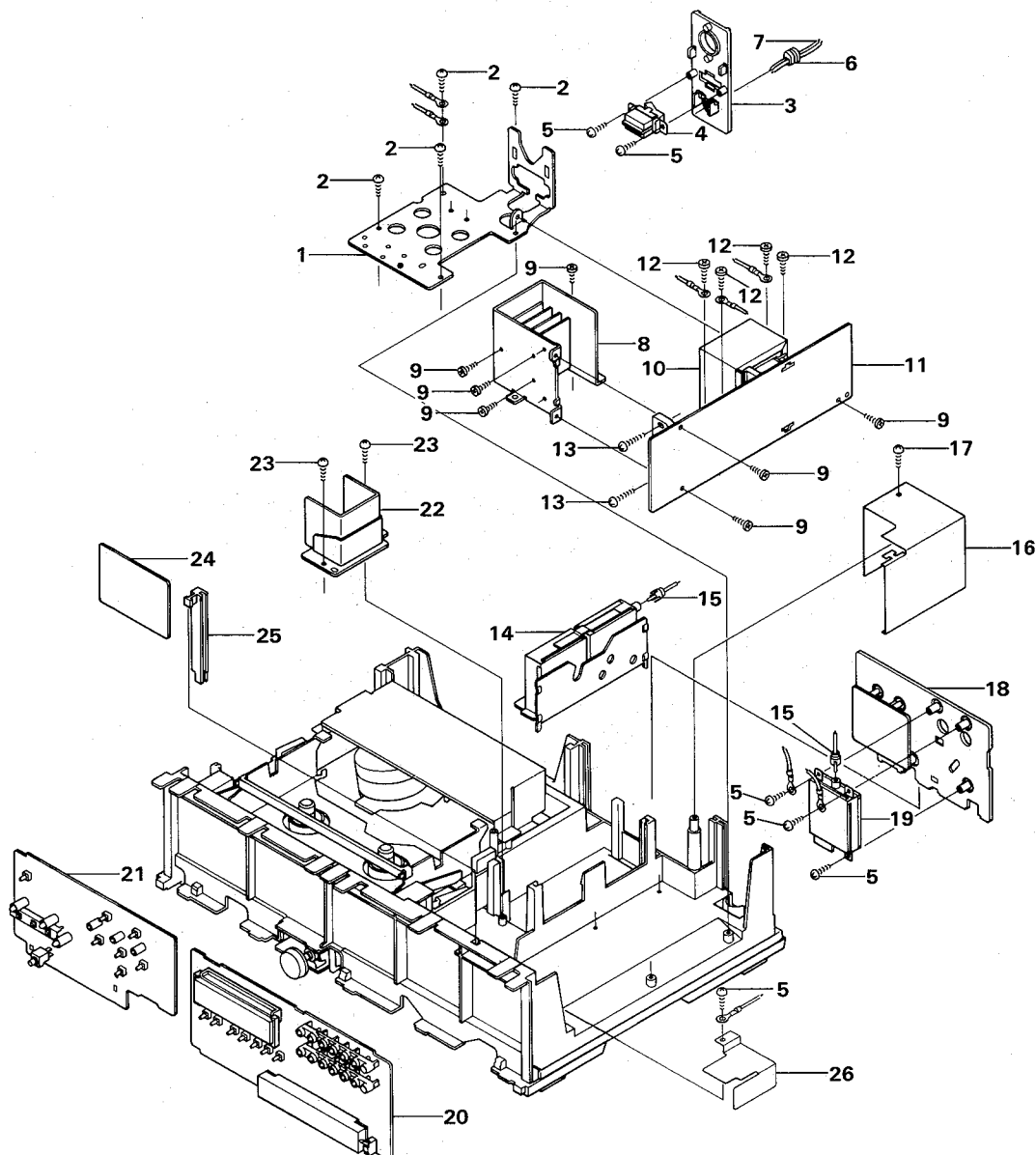


CABINET PARTS (2)

Ref No	Part No.	Description
1	143-2-3404-07400	Brkt, Power Unit-HAB
2	103-3-1904-01211	Screw, Brazier Hd Tapping S-Tite +M4×12
3	143-0-1204-00400	Power Terminal Board Assy-HAB
4	4-2314-00340	See Saw Switch
5	103-3-1903-00811	Screw, Brazier Hd Tapping S-Tite +M3×8
6	143-2-6104-02400	HEYCO Bush-SR-4K-4
7	0-4054-00090	Power Cord Assy (EUR)
or	0-4054-00091	Power Cord Assy (EUR)
8	143-0-7904-00400	Radiator Assy-HAB
9	116-3-1703-00811	Screw, Bind Hd Tapping B-Tite +M3×8
10	4-2514-00402	Power Transformer
11	0-4014-01401	Power A, PC Assy
12	116-3-1704-00811	Screw, Bind Hd Tapping B-Tite +M4×8

Ref No	Part No.	Description
13	103-3-1903-51612	Screw, Brazier Hd Tapping S-Tite +M3.5×16
14	4-1154-03220	Tuner IF Unit
15	0-4034-00050	Wire Shield Assy
16	143-2-3604-00700	Insulator Plate-HAB
17	103-3-1903-00811	Screw, Brazier Hd Tapping S-Tite +M3×8
18	0-4014-01090	Rear Terminal PC Assy
19	4-1164-02220	RF Converter-A
20	0-4014-01130	Timer PC Assy
21	0-4014-01122	Key Function PC Assy
22	0-4014-01410	Power B, PC Assy
23	103-3-1903-01011	Screw, Brazier Hd Tapping S-Tite +M3×10
24	0-4014-01080	Mute PC Assy
25	143-2-3304-02000	P.C.B. Holder-HAB-B
26	143-2-3504-04500	Shielded Plate-HAB-B

NOTE: Parts order must contain Model Number, Part Number and Description.

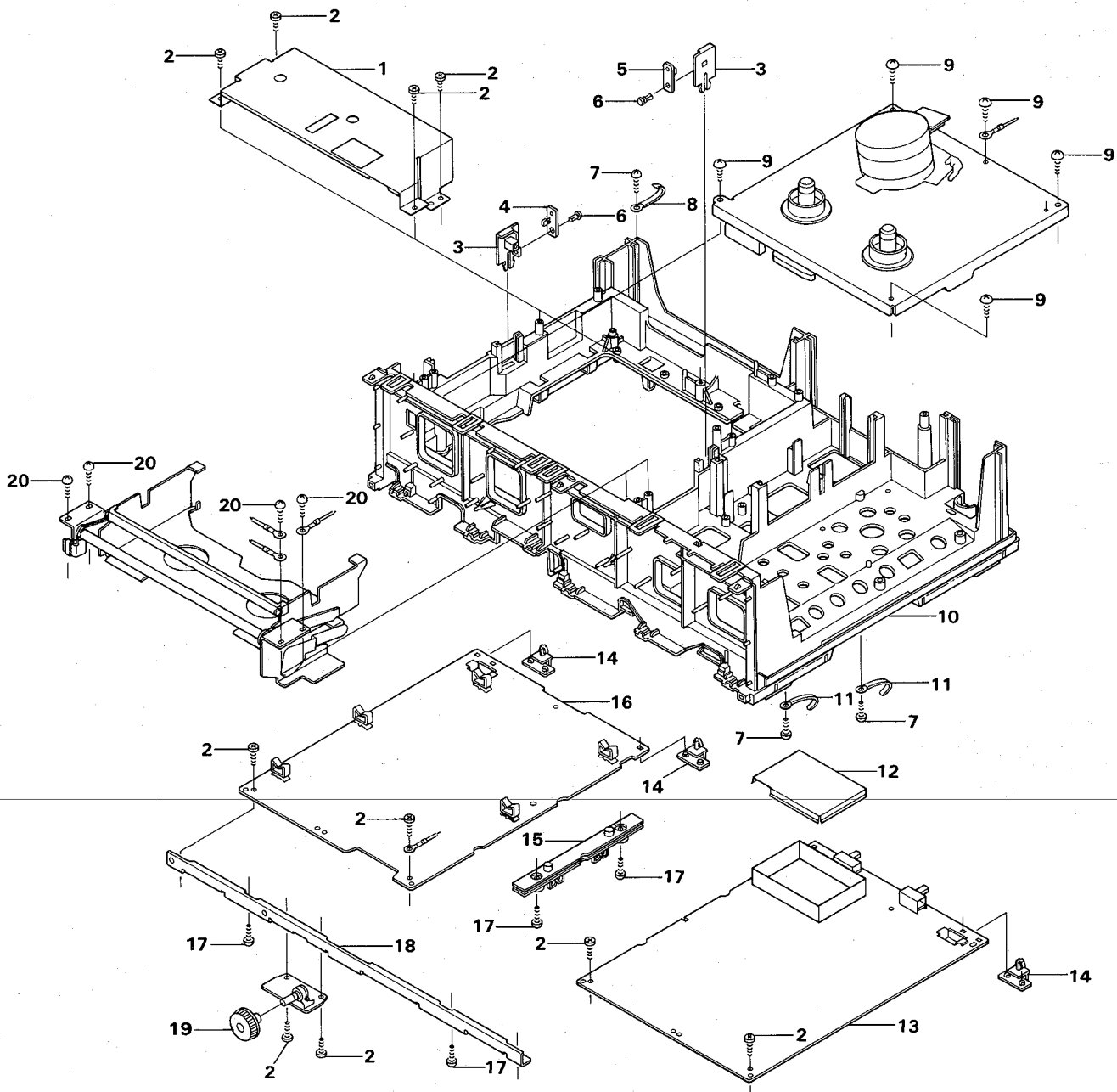


CABINET PARTS (3)

Ref No	Part No.	Description
1	143-2-3504-02500	Shield Plate-HAB
2	116-3-1703-00811	Screw, Brazier Hd Tapping B-Tite +M3×8
3	143-2-3404-07100	Holder, Sensor-HAB
4	0-4014-01140	End Sensor PC Assy (ESS)
5	0-4014-01140	End Sensor PC Assy (EST)
6	143-2-6104-03200	Plastic Rivet-3.5×5.5
7	103-3-1903-01011	Screw, Brazier Hd Tapping S-Tite +M3×10
8	143-2-5854-00300	Clamp, Wire
9	103-3-1804-01211	Screw, Tras Tapping +M4×12
10	143-0-1304-00300	Cabinet Bottom Assy-HAB

Ref No	Part No.	Description
11	143-2-5854-00400	Clamp, Wire
12	143-2-3504-02200	Shield, Case Top-HAB
13	0-4014-01100	Video Audio PC Assy
14	143-2-7404-00200	P.C.B Hinge-A
15	143-2-3304-01800	P.C.B Holder-HAB
16	0-4014-01112	Syscon Servo PC Assy
17	103-3-1903-01219	Screw, Brazier Hd Tapping S-Tite +M3×12
18	143-2-3404-07500	Brkt, P.C.B.-HAB
19	143-2-1704-06300	Knob, Tracking-HAB
20	101-3-1903-01211	Screw, Brazier Hd Tapping S-Tite +M3×12

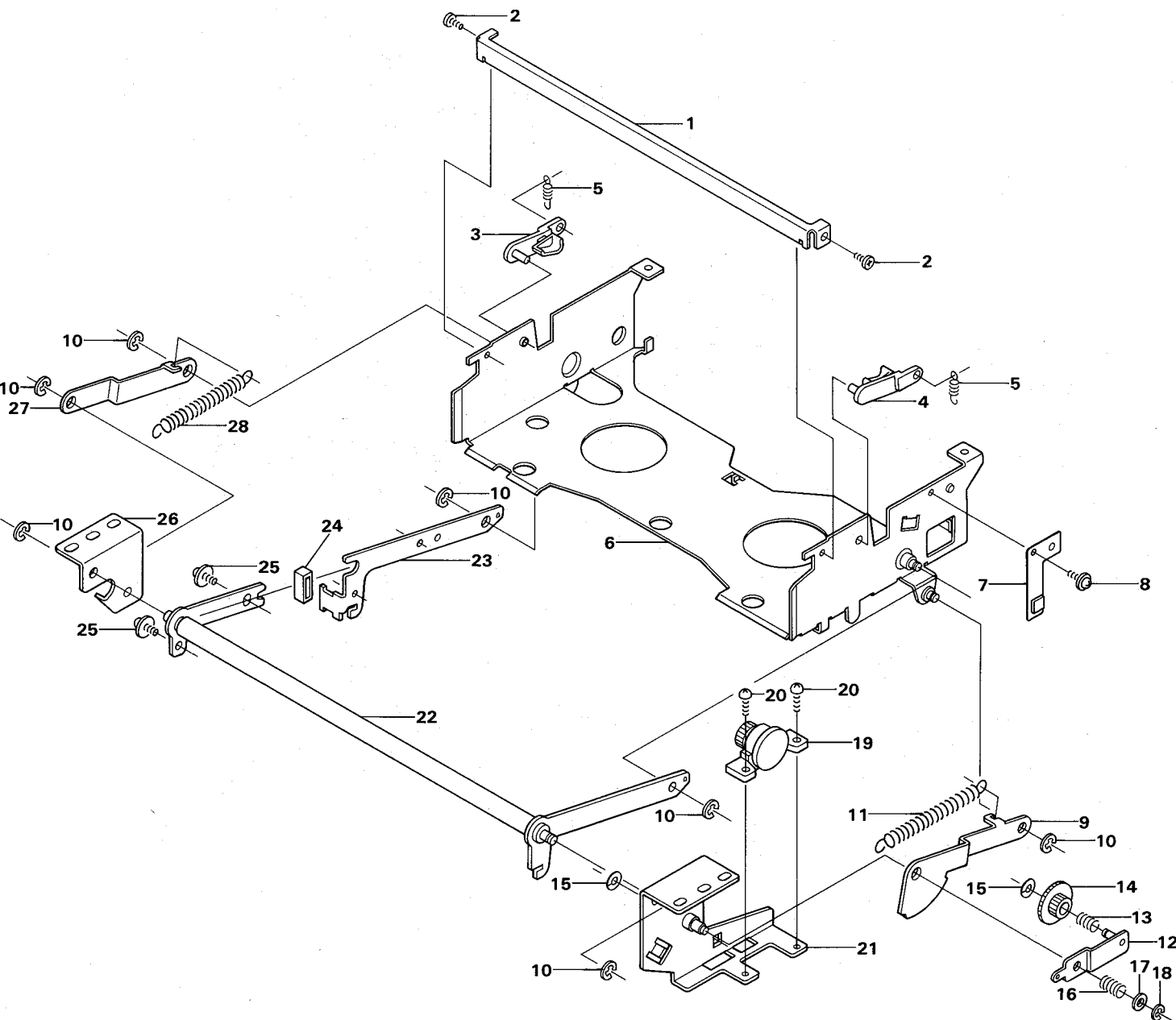
NOTE: Parts order must contain Model Number, Part Number and Description.



CHASSIS PARTS (1)

Ref No	Part No.	Description	Ref No	Part No.	Description
1	143-2-7304-08400	Beam	15	143-2-6304-02300	Washer, Stopper
2	101-3-1303-00411	Screw, Pan Hd Machine +M3×4	16	143-2-6704-02800	Spring, Plate Gear
3	143-2-7304-08700	Clamp Cassette Hold Down Take Up Reel Side	17	110-3-1203-00011	Washer, 7×3.2×0.5
4	143-2-7304-08600	Clamp Cassette Hold Down Supply Reel Side	18	112-3-1302-50040	E-Ring, M2.5
5	143-2-6604-03200	Spring Cassette Hold Down Clamp	19	143-2-7304-10401	Oil, Damper
6	143-0-7304-04200	Stage Assy	20	101-3-1303-00511	Screw, Pan Hd Machine +M3×5
7	143-2-6904-08600	Spring, Cassette Opener	21	143-0-7304-04400	Brkt Eject Take Assy
8	143-2-5804-02205	Screw, Pan Hd Machine +M2.6×5	22	143-0-7304-04500	Lod Eject Assy
9	143-2-7304-09600	Link, Eject Take Up Low	23	143-2-7304-09700	Link, Eject Supply
10	112-3-1303-00040	E-Ring, M3	24	143-2-7304-08200	Cushion
11	143-2-6604-03400	Spring, Link Eject Take Up	25	136-3-1303-00516	Screw, Pan Hd Machine Combination Plain Washer +M3×5
12	143-0-7304-04600	Plate Gear Assy	26	143-0-7304-04300	Brkt Eject Supply Assy
13	143-2-6704-03000	Spring, Gear Friction	27	143-2-7304-09500	Link, Eject Supply Low
14	143-2-7304-08300	Gear, Eject	28	143-2-6604-03300	Spring, Link Eject Supply

NOTE: Parts order must contain Model Number, Part Number and Description.

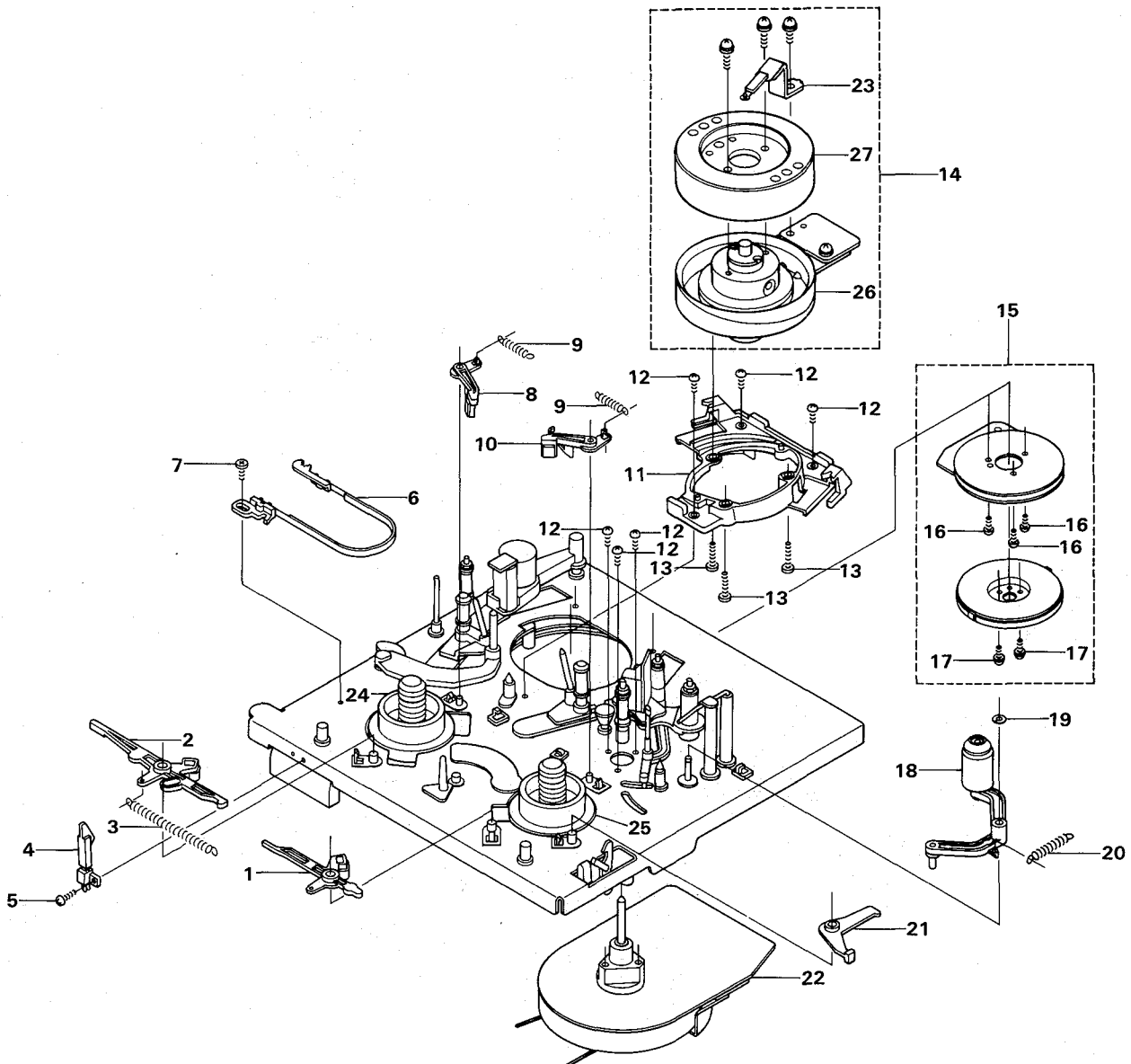


CHASSIS PARTS (2)

Ref No	Part No.	Description
1	143-0-5204-00700	Main Brake Take Up Assy
2	143-0-5204-00600	Main Brake Supply Assy
3	143-2-6604-02800	Spring, Main Brake
4	0-4064-00290	Safety Switch Assy
5	101-3-1302-60511	Screw, Pan Hd Machine +M2.6×5
6	143-2-5204-01500	Band, Brake
7	101-3-1702-60411	Screw, Bind Hd Machine +M2.6×4
8	143-0-5204-00400	Sub Brake Supply Assy
9	143-2-6604-04300	Spring, Sub Brake
10	143-0-5204-00500	Sub Brake Take Up Assy
11	143-0-3404-00800	Base Cylinder Assy
12	101-3-1302-60611	Screw, Pan Hd Machine +M2.6×6
13	101-3-1703-00611	Screw, Bind Hd Machine +M3×6
14	143-0-4704-02400	Cylinder Complete
15	4-5254-00120	Cylinder Motor

Ref No	Part No.	Description
or	4-5254-00121	Cylinder Motor
16	143-2-5804-02000	Screw, M2.3×5
17	143-2-5804-03000	Screw, Pan Hd Machine Combination Plain Washer +M2.3×5
18	143-0-4604-00700	Pinch Roller Final Assy
19	143-2-6304-01800	Washer, Stopper 2.5×6×0.25
20	143-2-6604-02400	Spring, Pinch Tension
21	143-2-5104-06100	Lever, Eject
22	4-5254-00130	Capstan, Motor
23	143-0-4704-02000	Earth Plate Assy
24	143-0-4104-00600	Reel Supply Assy
25	143-0-4104-00700	Reel Take Up Assy
26	143-0-9934-00200	Cylinder Assy
27	143-0-4704-01000	Cylinder Upper Assy

NOTE: Parts order must contain Model Number, Part Number and Description.

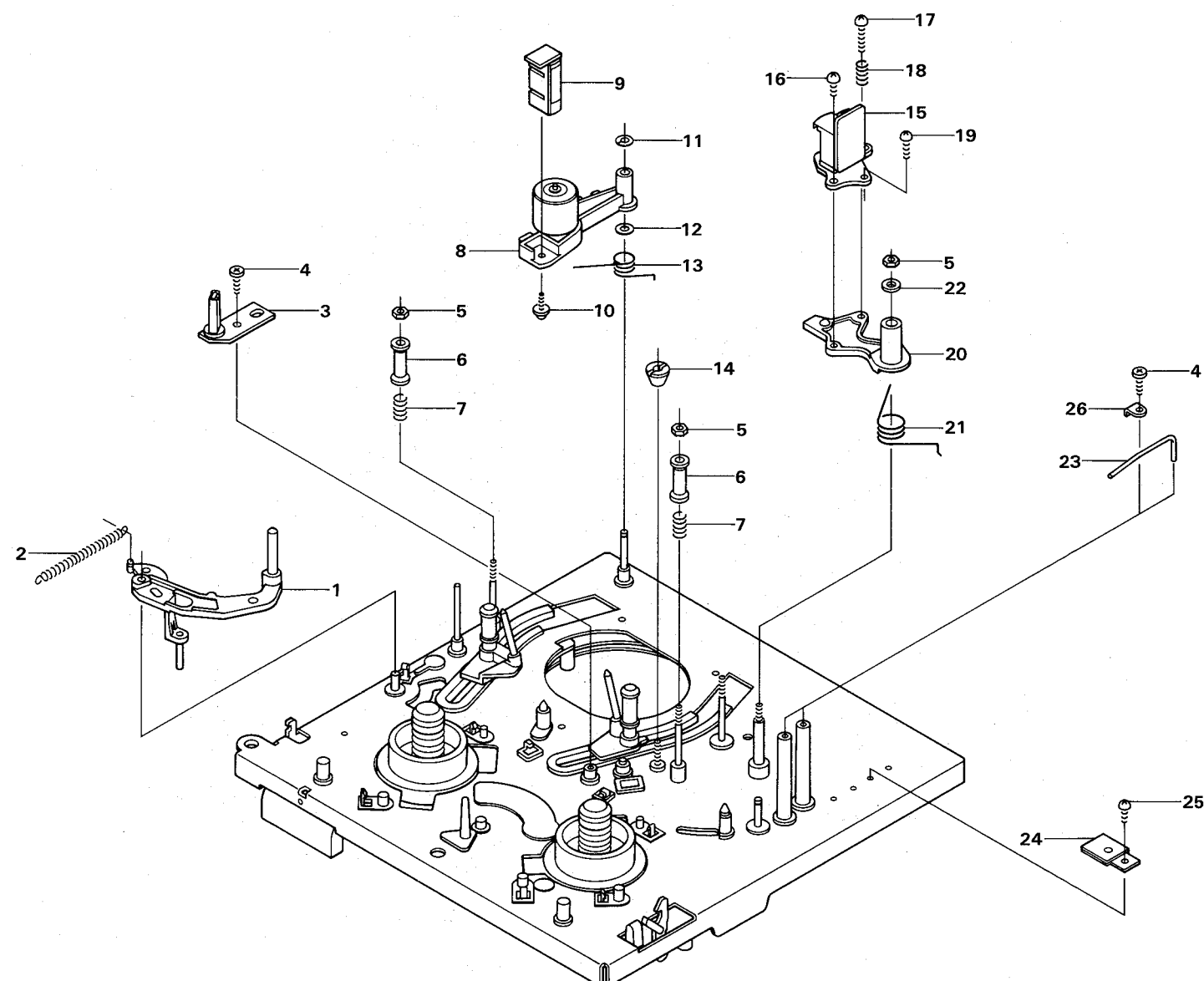


CHASSIS PARTS (3)

Ref No	Part No.	Description
1	143-0-5104-02700	Arm Tension Assy
2	143-2-6604-04200	Spring, Arm Tension
3	0-4014-01150	End LED PC Assy
4	119-3-1302-60611	Screw Pan Hd Tapping D-Tite +M2.6X6
5	106-3-1103-00011	Nut, M3
6	143-2-7704-01800	Guide, Tape
7	143-2-6704-00500	Spring, Adjust Guide
8	143-0-5104-01200	Arm Impedance Roller Complete
9	0-4064-00270	Full Erase Hd Assy
10	136-3-1302-00511	Screw, Pan Hd Machine Combination Plain Washer M2X5
11	143-2-6304-01800	Washer, Stopper 2.5X6X0.25
12	143-2-6304-00700	Washer, 3.2X6X0.25
13	143-2-6804-01600	Spring, Arm Impedance
14	143-2-5704-00400	Nut, Tangential

Ref No	Part No.	Description
15	0-4064-00260	Audio Control Erase Hd Assy
16	101-3-1302-60611	Screw, Pan Hd Machine +M2.6X6
17	101-3-1302-61211	Screw, Pan Hd Machine +M2.6X12
18	143-2-6704-01600	Spring, Azimuth
19	143-2-5804-02300	Set, Screw
20	143-2-5104-05400	Base, Audio Control Erase Hd
21	143-2-6704-03200	Spring Tangential Adjust
22	143-2-6204-00500	Washer, 3.2X8X1
23	143-2-3404-08100	Lid, Opener
24	143-0-3404-01700	Dew Sensor Assy
25	116-3-1702-60611	Screw, Bind Hd Tapping B-Tite +M2.6X6
26	143-2-3404-08200	Plate, Lid Opener

NOTE: Parts order must contain Model Number, Part Number and Description.

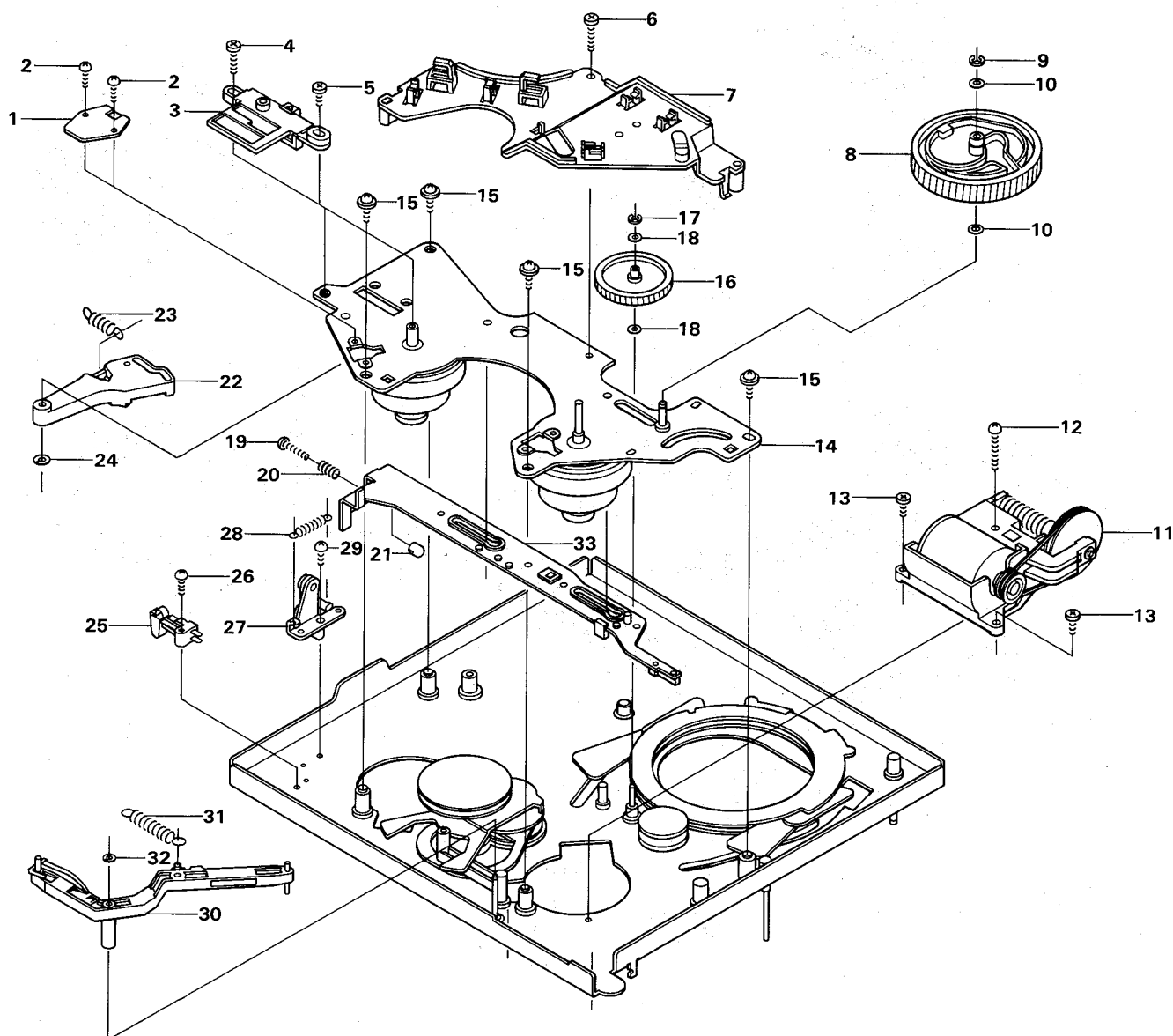


CHASSIS PARTS (4)

Ref No	Part No	Description
1	0-4014-01160	Counter PC Assy
2	101-3-1302-00311	Screw, Pan Hd Machine +M2×3
3	4-2314-00250	Mode, Select Switch
4	101-3-1702-60811	Screw, Bind Hd Machine +M2.6×8
5	101-3-1702-60411	Screw, Bind Hd Machine +M2.6×4
6	101-3-1702-61411	Screw, Bind Hd Machine +M2.6×14
7	143-2-3404-09700	Protector
8	143-2-7804-00300	Master, Cam
9	112-3-1302-50040	E-Ring, M2.5
10	143-2-6304-00700	Washer, 3.2×6×0.25
11	143-0-3404-01000	Loading Drive Complete
12	101-3-1702-62511	Screw, Bind Hd Machine +M2.6×25
13	101-3-1702-60611	Screw, Bind Hd Machine +M2.6×6
14	143-0-3404-01900	Brkt Reel Assy
15	143-2-5804-02508	Screw, Pan Hd Tapping Del-Tite +M2.6×8
16	143-2-4904-01300	Gear, Loading Take Up
17	112-3-1301-50040	E-Ring, M1.5

Ref No	Part No	Description
18	143-2-6304-00600	Washer, 2.1×4×0.25
19	101-3-1302-61211	Screw, Bind Hd Machine +M2.6×12
20	143-2-6704-02400	Spring, Stopper
21	143-2-6104-02600	Cap, Stopper
22	143-2-7804-00200	Actuator, Cam
23	143-2-6604-04600	Spring, Actuator Cam
24	143-2-6304-01800	Washer, Stopper 2.5×6×0.25
25	0-4064-00280	Stage Switch Assy
26	101-3-1302-00811	Screw, Pan Hd Machine +M2×8
27	143-0-5104-01800	Arm Lock Stage Assy
28	143-2-6604-03000	Spring, Lock Stage
29	101-3-1302-60411	Screw, Pan Hd Machine +M2.6×4
30	143-0-5104-02400	Arm Idler Control Complete
31	143-2-6604-04100	Spring, Arm Control
32	143-2-6304-01500	Washer, Stopper 1.5×4×0.25
33	143-0-5104-01600	Main Plate Assy

NOTE: Parts order must contain Model Number, Part Number and Description.

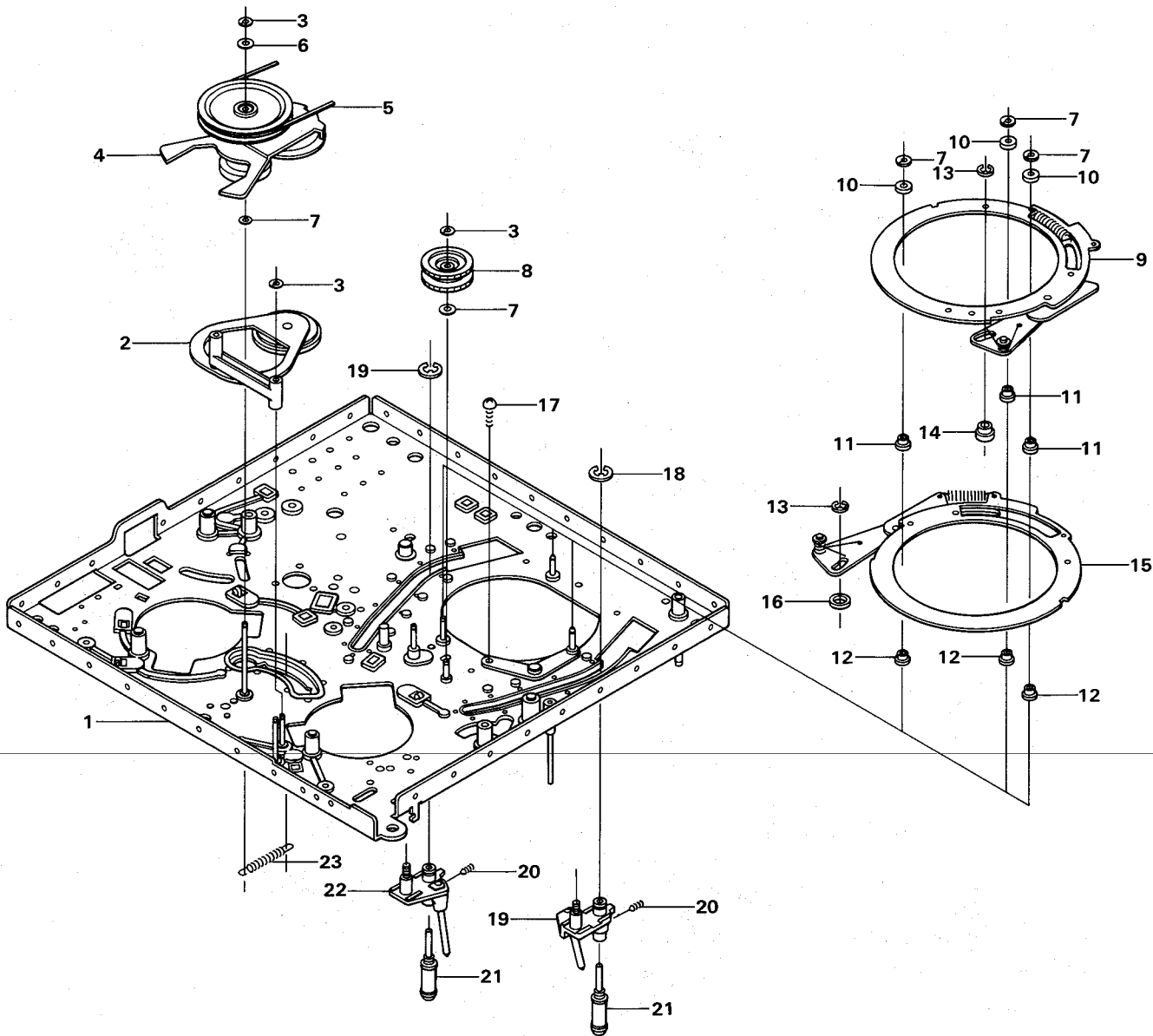


CHASSIS PARTS (5)

Ref No	Part No.	Description
1	143-0-3104-00300	Chassis Assy
2	143-0-4204-00300	Idler Assy
3	143-2-6304-01500	Washer, Stopper 1.5×4×0.25
4	143-0-4904-00900	Gear Idler Complete
5	143-2-7504-00400	Belt, Drive
6	143-2-6304-00700	Washer, 3.2×6×0.25
7	143-2-6304-00600	Washer, 2.1×4×0.25
8	143-2-4904-00800	Gear, Loading Supply
9	143-0-4904-00700	Ring Loading Supply Complete
10	143-2-4804-01200	Roller Lower
11	143-2-4804-01100	Roller Center
12	143-2-4804-01000	Roller, Upper
13	112-3-1302-00040	E-Ring, M2

Ref No	Part No.	Description
14	143-2-5604-02500	Spacer, Supply
15	143-0-4904-00500	Ring Loading Take Up Complete
16	143-2-5604-02600	Spacer, Take Up
17	143-2-5804-02205	Screw, Pan Hd with Flange +M2.6×5
18	112-3-1304-00040	E-Ring, M4
19	143-0-5104-01000	Base Guide Roller Supply Assy
20	115-3-3502-00486	Screw, Cone Type Hex M2×4
21	143-0-7704-00400	Guide Roller Assy
22	143-0-5104-00900	Base Guide Roller Take Up Assy
23	143-2-6704-02600	Spring, Idler

NOTE: Parts order must contain Model Number, Part Number and Description.



NOTE:

Materials of Capacitors and Resistors are abbreviated as follows.

ELECT.	.....	Electrolytic Capacitor
CERAM.	.....	Ceramic Capacitor
SEMI.	.....	Semiconductor Capacitor
MYLAR	.....	Mylar Film Capacitor
ALSIC.	.....	Alsicon Capacitor
PMCON.	.....	Polyester Polypropylene Capacitor
PPCON.	.....	Polypropylene Capacitor
TANTA.	.....	Tantal Electric Capacitor
CARBO.	.....	Carbon
FUSE.	.....	Fuse Resistor
OMF.	.....	Oxide Metal Film
METAL.	.....	Metal Oxide Metal Film

Tolerance of Capacitors and Resistors are noted with the follow symbols.

C.	.....	±0.25%
D.	.....	±0.5 PF
F.	.....	±1%
J.	.....	±5%
K.	.....	±10%
M.	.....	±20%
P.	.....	+100%—0%
Z.	.....	+80%—20%

VIDEO AUDIO CIRCUIT P.C.B. PARTS**VIDEO CIRCUIT PARTS**

Schematic Location	Part No.	Description
	0-4014-01100	VIDEO PC ASSY
	0-4030-00450	1P CORD ASSY D
	4-2374-00070	1P TERMINAL-D
	143-2-3504-02100	SHIELD CASE-HAB
	143-2-3504-02300	SHIELD CASE BOT-HAB
	143-2-5854-01500	PC SUPPORT R4N
	143-2-6204-02700	GND PLATE-HAB
		(CAPACITORS)
C201	C1HYDZ223F	CERAM 0.022μF 50V Z
C202	C1HYDZ473F	CERAM 0.047μF 50V Z
C203	C1HCDJ221CH	CERAM 220pF 50V J
C204	C1HCDJ221CH	CERAM 220pF 50V J
C205	C1HYDZ473F	CERAM 0.047μF 50V Z
C207	C1HCDD100CH	CERAM 10pF 50V D
C208	C1EBDK103SR	SEMI 0.01μF 25V K
C209	C1EBDK103SR	SEMI 0.01μF 25V K
C211	C1EBDK103SR	SEMI 0.01μF 25V K
C212	C1HLEM474A	ELECT 0.47μF 50V M
C213	C1EBDK333SR	SEMI 0.033μF 25V K
C214	C1EBDK103SR	SEMI 0.01μF 25V K
C215	C1HYDZ223F	CERAM 0.022μF 50V Z
C216	C1ELEM475A	ELECT 4.7μF 25V M
C217	C1HCDJ680SL	CERAM 68pF 50V J
C218	C1HCDJ470CH	CERAM 47pF 50V J
C221	C1HCDJ220CH	CERAM 22pF 50V J
C222	C1HCDJ121SL	CERAM 120pF 50V J
C223	C1HCDJ471SL	CERAM 470pF 50V J
C224	C1HCDJ101SL	CERAM 100pF 50V J
C225	C1EBDK333SR	SEMI 0.033μF 25V K
C226	C1HCDJ151CH	CERAM 150pF 50V J
C227	C1EBDK223SR	SEMI 0.022μF 25V K
C228	C1EBDK223SR	SEMI 0.022μF 25V K
C232	C1EBDK103SR	SEMI 0.01μF 25V K
C233	C1HCDJ120CH	CERAM 12pF 50V J
C234	C1EBDK103SR	SEMI 0.01μF 25V K
C236	C1HLEM105A	ELECT 1μF 50V M
C237	C1ALEM476A	ELECT 47μF 10V M
C238	C1HYDZ223F	CERAM 0.022μF 50V Z
C239	C1HLEM105A	ELECT 1μF 50V M
C241	C1HLEM105A	ELECT 1μF 50V M

Schematic Location	Part No.	Description
C242	C1HYDZ223F	CERAM 0.022μF 50V Z
C243	C1HYDZ473F	CERAM 0.047μF 50V Z
C244	C1CLEM106A	ELECT 10μF 16V M
C245	C1HYDZ223F	CERAM 0.022μF 50V Z
C246	C1CLEM106A	ELECT 10μF 16V M
C247	C1HLEM105A	ELECT 1μF 50V M
C248	C1HYDZ223F	CERAM 0.022μF 50V Z
C249	C1HYDZ223F	CERAM 0.022μF 50V Z
C250	C1ALEM476A	ELECT 47μF 10V M
C251	C1CLEM106A	ELECT 10μF 16V M
C252	C1EBDK103SR	SEMI 0.01μF 25V K
C253	C1HCDJ271SL	CERAM 270pF 50V J
C254	C1HCDJ101SL	CERAM 100pF 50V J
C255	C1ELEM475A	ELECT 4.7μF 25V M
C256	C1HCDJ820CH	CERAM 82pF 50V J
C257	C1EBDK333SR	SEMI 0.033μF 25V K
C259	C1HYDZ223F	CERAM 0.022μF 50V Z
C261	C1ALEM476A	ELECT 47μF 10V M
C262	C1EBDK223SR	SEMI 0.022μF 25V K
C263	C1HYDZ473F	CERAM 0.047μF 50V Z
C264	C1ALEM227A	ELECT 220μF 10V M
C265	C1ELEM475A	ELECT 4.7μF 25V M
C266	C1CLEM106A	ELECT 10μF 16V M
C267	C1HLEM335A	ELECT 3.3μF 50V M
C268	C1HCDJ221SL	CERAM 220pF 50V J
C269	C1ELEM475A	ELECT 4.7μF 25V M
C271	C1HCDJ390SL	CERAM 39pF 50V J
C272	C1HCDJ151SL	CERAM 150pF 50V J
C273	C1HCDJ101SL	CERAM 100pF 50V J
C274	C1CLEM226A	ELECT 22μF 16V M
C275	C1HCDJ221SL	CERAM 220pF 50V J
C276	C1HYDK682B	CERAM 0.0068μF 50V K
C278	C1HLEM105A	ELECT 1μF 50V M
C279	C1EBDK104SR	SEMI 0.1μF 25V K
C281	C1EBDK104SR	SEMI 0.1μF 25V K
C282	C1HCDJ560SL	CERAM 56pF 50V J
C283	C1HCDJ181SL	CERAM 180pF 50V J
C284	C1HYDZ103F	CERAM 0.01μF 50V Z
C285	C1HCDJ180SL	CERAM 18pF 50V J
C286	C1HCDJ471SL	CERAM 470pF 50V J
C287	C1HCDJ331SL	CERAM 330pF 50V J

Schematic Location	Part No.	Description	Schematic Location	Part No.	Description
C289	C1ALEM476A	ELECT 47 μ F 10V M	C369	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C296	C1HYDZ223F	CERAM 0.022 μ F 50V Z	C370	C1HYDK681B	CERAM 680pF 50V K
C297	C1ALEM107A	ELECT 100 μ F 10V M	C371	C1EBDK333SR	SEMI 0.033 μ F 25V K
C298	C1HYDZ473F	CERAM 0.047 μ F 50V Z	C373	C1HCDD7ROCH	CERAM 7pF 50V J
C299	C1ALEM107A	ELECT 100 μ F 10V M	C374	4-2244-00020	TRIMMER CON 20P
C301	C1HCDJ271SL	CERAM 270pF 50V J	C375	C1HYDK102B	CERAM 0.001 μ F 50V K
C302	C1ALEM476A	ELECT 47 μ F 10V M	C376	C1HYDK102B	CERAM 0.001 μ F 50V K
C303	C1HCDJ220SL	CERAM 22pF 50V J	C377	C1CLEM106A	ELECT 10 μ F 16V M
C304	C1ALEM476A	ELECT 47 μ F 10V M	C378	C1HCDJ470CH	CERAM 47pF 50V J
C305	C1HCDJ181SL	CERAM 180pF 50V J	C379	C1EBDK473SR	SEMI 0.047 μ F 25V K
C306	C1HLEM105A	ELECT 1 μ F 50V M	C382	C1HCDJ220CH	CERAM 22pF 50V J
C307	C1HCDJ471SL	CERAM 470pF 50V J	C383	C1HCDJ101CH	CERAM 100pF 50V J
C308	C1HCDJ820SL	CERAM 82pF 50V J	C385	C1HCDJ680CH	CERAM 68pF 50V J
C309	C1HYDZ103F	CERAM 0.01 μ F 50V Z	C386	C1HCDJ220CH	CERAM 22pF 50V J
C311	C1HYDZ103F	CERAM 0.01 μ F 50V Z			(DIODES)
C312	C1ALEM107A	ELECT 100 μ F 10V M	D201	DGGMA01-L	DIODE GMA01-L
C313	COJLEM477A	ELECT 470 μ F 6.3V M	or	DY1SS133	DIODE 1SS133
C314	C1HYDZ223F	CERAM 0.022 μ F 50V Z	D203	DGGMA01-L	DIODE GMA01-L
C315	COJLEM108A	ELECT 1000 μ F 6.3V M	or	DY1SS133	DIODE 1SS133
C316	C1ALEM476A	ELECT 47 μ F 10V M	D208	DGGMA01-L	DIODE GMA01-L
C317	C1ALEM476A	ELECT 47 μ F 10V M	or	DY1SS133	DIODE 1SS133
C319	C1HYDZ223F	CERAM 0.022 μ F 50V Z	D209	DGGMA01-L	DIODE GMA01-L
C320	C1ALEM476A	ELECT 47 μ F 10V M	or	DY1SS133	DIODE 1SS133
C321	C1CLEM476A	ELECT 47 μ F 16V M	D210	DGGMA01-L	DIODE GMA01-L
C322	C1HYDZ223F	CERAM 0.022 μ F 50V Z	or	DY1SS133	DIODE 1SS133
C323	C1ALEM227A	ELECT 220 μ F 10V M	D211	DGGMA01-L	DIODE GMA01-L
C324	C1HYDZ223F	CERAM 0.022 μ F 50V Z	or	DY1SS133	DIODE 1SS133
C325	C1HYDK102B	CERAM 0.001 μ F 50V K	D212	DGGMA01-L	DIODE GMA01-L
C326	C1HFRK103A	MYLAR 0.01 μ F 50V K	or	DY1SS133	DIODE 1SS133
C327	C1HYDK821B	CERAM 820pF 50V K	D213	DGGMA01-L	DIODE GMA01-L
C328	C1HYDK472B	CERAM 0.0047 μ F 50V K	or	DY1SS133	DIODE 1SS133
C329	C1HYDZ223F	CERAM 0.022 μ F 50V Z	D214	DGGMA01-L	DIODE GMA01-L
C331	C1HLEM105A	ELECT 1 μ F 50V M	or	DY1SS133	DIODE 1SS133
C332	C1EBDK223SR	SEMI 0.022 μ F 25V K	D215	DGGMA01-L	DIODE GMA01-L
C333	C1EBDK223SR	SEMI 0.022 μ F 25V K	or	DY1SS133	DIODE 1SS133
C334	C1ELEM475A	ELECT 4.7 μ F 25V M	D216	DGGMA01-L	DIODE GMA01-L
C335	C1EBDK223SR	SEMI 0.022 μ F 25V K	or	DY1SS133	DIODE 1SS133
C336	C1HYDZ103F	CERAM 0.01 μ F 50V Z			(ICs)
C337	C1HYDZ223F	CERAM 0.022 μ F 50V Z	IC201	IHHA11744	IC HA11744
C338	C1ALEM107A	ELECT 100 μ F 10V M	IC202	IHHA11745	IC HA11745
C339	C1HYDZ103F	CERAM 0.01 μ F 50V Z	IC203	IHHA11781ANT	IC HA11781ANT
C340	C1ALEM476A	ELECT 47 μ F 10V M	IC204	IWM51454L	IC M51454L
C341	C1EUEK224A	ALSIC 0.22 μ F 25V K	IC205	IYBA7100	IC BA7100
C342	C1EUEK154A	ALSIC 0.15 μ F 25V K			(COILS)
C343	C1HYDZ223F	CERAM 0.022 μ F 50V Z	L200	4-2724-U100K	INDUCTOR 10 μ H
C344	C1EBDK223SR	SEMI 0.022 μ F 25V K	L201	4-2724-U8R2K	INDUCTOR 8.2 μ H
C345	C1HYDZ103F	CERAM 0.01 μ F 50V Z	L202	4-2724-U8R2K	INDUCTOR 8.2 μ H
C346	C1HYDZ103F	CERAM 0.01 μ F 50V Z	L203	4-2724-U390K	INDUCTOR 39 μ H
C347	C1HYDZ103F	CERAM 0.01 μ F 50V Z	L204	4-2724-U560K	INDUCTOR 56 μ H
C348	C1HCDJ820CH	CERAM 82pF 50V J	L205	4-2724-E151K	INDUCTOR 150 μ H
C349	C1HCDJ220CH	CERAM 22pF 50V J	L206	4-2724-U390K	INDUCTOR 39 μ H
C350	C1ELEM475A	ELECT 4.7 μ F 25V M	L207	4-2724-U221K	INDUCTOR 220 μ H
C351	C1HCDJ220CH	CERAM 22pF 50V J	L208	4-2724-E270K	INDUCTOR 27 μ H
C352	C1EBDK473SR	SEMI 0.047 μ F 25V K	L209	4-2724-U221K	INDUCTOR 220 μ H
C353	C1ELEM475A	ELECT 4.7 μ F 25V M	L210	4-2724-U101K	INDUCTOR 100 μ H
C354	C1EUEK334A	ALSIC 0.33 μ F 25V K	L211	4-2724-E471K	INDUCTOR 470 μ H
C355	C1HLEM335A	ELECT 3.3 μ F 50V M	L212	4-2724-U470K	INDUCTOR 47 μ H
C356	C1CLEM336A	ELECT 33 μ F 16V M	L214	4-2724-U470K	INDUCTOR 47 μ H
C357	C1HYDK391B	CERAM 390pF 50V K	L216	4-2724-U390K	INDUCTOR 39 μ H
C358	C1HYDK332B	CERAM 0.0033 μ F 50V K	L217	4-2724-U100K	INDUCTOR 10 μ H
C359	C1EBDK103SR	SEMI 0.01 μ F 25V K	L218	4-2724-U390K	INDUCTOR 39 μ H
C360	C1EBDK103SR	SEMI 0.01 μ F 25V K	L219	4-2724-U390K	INDUCTOR 39 μ H
C361	C1EUEK224A	ALSIC 0.22 μ F 25V K			
C362	C1HYDZ223F	CERAM 0.022 μ F 50V Z			
C363	C1HCDJ220SL	CERAM 22pF 50V J			
C364	C1HYDK681B	CERAM 680pF 50V K			
C365	C1HCDJ391SL	CERAM 390pF 50V J			
C366	C1EBDK103SR	SEMI 0.01 μ F 25V K			
C367	C1HYDK222B	CERAM 0.0022 μ F 50V K			
C368	C1HYDK561B	CERAM 560pF 50V K			

Schematic Location	Part No.	Description
L220	4-2724-U221K	INDUCTOR 220 μ H
L221	4-2724-U221K	INDUCTOR 220 μ H
L222	4-2724-U221K	INDUCTOR 220 μ H
L223	4-2724-U221K	INDUCTOR 220 μ H
L224	4-2724-U221K	INDUCTOR 220 μ H
L225	4-2724-U221K	INDUCTOR 220 μ H
L226	4-2724-U221K	INDUCTOR 220 μ H
L227	4-2724-E821K	INDUCTOR 820 μ H
L228	4-2724-U101K	INDUCTOR 100 μ H
L229	4-2724-U270K	INDUCTOR 27 μ H
L230	4-2724-E331K	INDUCTOR 330 μ H
L231	4-2554-00060	INDUCTOR 12MH
L232	4-2554-00070	INDUCTOR 15MH
L233	4-2724-U221K	INDUCTOR 220 μ H
L235	4-2724-Z6R8K	INDUCTOR 6.8 μ H
L236	4-2724-Z180K	INDUCTOR 18 μ H
L241	4-2724-U390K	INDUCTOR 39 μ H
L251	4-2594-00040	TRAP COIL
L252	4-2534-00070	1.4M HIGH PASS FILTER
L253	4-2534-00100	DELAY EQUALIZER
L254	4-2534-00090	3.5M LOW PASS FILTER
L255	4-2534-00100	DELAY EQUALIZER
L256	4-2534-00090	3.5M LOW PASS FILTER
L257	4-2534-00250	1.5M C-LOW PASS FILTER
L258	4-2534-00260	5.06M BAND PASS FILTER
L259	4-2534-00130	4.43M BAND PASS FILTER
L260	4-2534-00080	1.5M LOW PASS FILTER
L261	4-2534-00240	RF RELAY EQUALIZER
(PLUGS)		
PV201	4-2364-00260	6P PLUG VERTICAL
PV202	4-2364-00250	5P PLUG VERTICAL
PV203	4-2364-00240	4P PLUG VERTICAL
PV204	4-2364-00240	4P PLUG VERTICAL
PV205	4-2364-00230	3P PLUG VERTICAL
PV206	4-2364-00290	9P PLUG VERTICAL
PV207	4-2364-00220	2P PLUG VERTICAL
PV208	4-2364-00220	2P PLUG VERTICAL
PV209	4-2364-00220	2P PLUG VERTICAL
(TRANSISTORS)		
Q201	TG2SA608SP	TR 2SA608SP(F) or (G)
Q203	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q204	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q205	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q206	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q207	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q208	TG2SC2274	TR 2SC2274(E) or (F)
or	TN2SC2002	TR 2SC2002(K) or (L)
Q209	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q211	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q212	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q213	TG2SA608SP	TR 2SA608SP(F) or (G)
Q215	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q222	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q223	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q224	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q225	TG2SC2274	TR 2SC2274(E) or (F)
or	TN2SC2002	TR 2SC2002(K) or (L)

Schematic Location	Part No.	Description
Q226	TG2SC2274	TR 2SC2274(E) or (F)
or	TN2SC2002	TR 2SC2002(K) or (L)
Q227	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q228	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q229	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q230	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q231	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q232	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q233	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q234	TG2SA608SP	TR 2SA608SP(F) or (G)
Q235	TG2SA608SP	TR 2SA608SP(F) or (G)
Q236	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q237	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q238	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q239	TYDTC124N	TR DTC124N
Q241	TG2SC3400	TR 2SC3400
or	TYDTC124N	TR DTC124N
Q242	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q243	TG2SC3400	TR 2SC3400
or	TYDTC124N	TR DTC124N
Q244	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
(RESISTORS)		
R200	R2ESPJ102A	CARBO 1k 1/4W J
R2000	R2ESPJ123A	CARBO 12k 1/4W J
R2001	R2ESPJ102A	CARBO 1k 1/4W J
R2002	R2ESPJ102A	CARBO 1k 1/4W J
R2003	R2ESPJ122A	CARBO 1.2k 1/4W J
R2004	R2ESPJ152A	CARBO 1.5k 1/4W J
R2005	R2ESPJ221A	CARBO 220 1/4W J
R2006	R2ESPJ564A	CARBO 560k 1/4W J
R2007	R2ESPJ182A	CARBO 1.8k 1/4W J
R2008	R2ESPJ222A	CARBO 2.2k 1/4W J
R2009	R2ESPJ222A	CARBO 2.2k 1/4W J
R201	R2ESPJ222A	CARBO 2.2k 1/4W J
R2010	R2ESPJ682A	CARBO 6.8k 1/4W J
R2011	R2ESPJ103A	CARBO 10k 1/4W J
R2012	R2ESPJ103A	CARBO 10k 1/4W J
R2013	R2ESPJ332A	CARBO 3.3k 1/4W J
R2014	R2ESPJ123A	CARBO 12k 1/4W J
R2015	R2ESPJ472A	CARBO 4.7k 1/4W J
R2016	R2ESPJ274A	CARBO 270k 1/4W J
R2017	R2ESPJ333A	CARBO 33k 1/4W J
R2018	R2ESPJ821A	CARBO 820 1/4W J
R2019	R2ESPJ472A	CARBO 4.7k 1/4W J
R202	R2ESPJ221A	CARBO 220 1/4W J
R2021	R2ESPJ122A	CARBO 1.2k 1/4W J
R2022	R2ESPJ681A	CARBO 680 1/4W J
R2023	R2ESPJ562A	CARBO 5.6k 1/4W J
R2024	R2ESPJ123A	CARBO 12k 1/4W J
R2025	R2ESPJ472A	CARBO 4.7k 1/4W J
R2026	R2ESPJ562A	CARBO 5.6k 1/4W J
R2027	R2ESPJ182A	CARBO 1.8k 1/4W J
R2028	R2ESPJ820A	CARBO 82 1/4W J
R203	R2ESPJ392A	CARBO 3.9k 1/4W J
R2030	R2ESPJ102A	CARBO 1k 1/4W J
R2031	R2ESPJ102A	CARBO 1k 1/4W J
R2032	R2ESPJ122A	CARBO 1.2k 1/4W J

Schematic Location	Part No.	Description		
R2033	R2ESPJ471A	CARBO	470	1/4W J
R2034	R2ESPJ471A	CARBO	470	1/4W J
R2035	R2ESPJ471A	CARBO	470	1/4W J
R2036	R2ESPJ103A	CARBO	10k	1/4W J
R2037	R2ESPJ562A	CARBO	5.6k	1/4W J
R2038	R2ESPJ332A	CARBO	3.3k	1/4W J
R2039	R2ESPJ391A	CARBO	390	1/4W J
R2041	R2ESPJ392A	CARBO	3.9k	1/4W J
R2042	R2ESPJ331A	CARBO	330	1/4W J
R2043	R2ESPJ102A	CARBO	1k	1/4W J
R2044	R2ESPJ333A	CARBO	33k	1/4W J
R2045	R2ESPJ823A	CARBO	82k	1/4W J
R2046	R2ESPJ104A	CARBO	100k	1/4W J
R2047	R2ESPJ472A	CARBO	4.7k	1/4W J
R2048	R2ESPJ122A	CARBO	1.2k	1/4W J
R2049	R2ESPJ102A	CARBO	1k	1/4W J
R205	R2ESPJ103A	CARBO	10k	1/4W J
R2050	R2ESPJ562A	CARBO	5.6k	1/4W J
R2051	R2ESPJ182A	CARBO	1.8k	1/4W J
R2052	R2ESPJ562A	CARBO	5.6k	1/4W J
R2053	R2ESPJ101A	CARBO	100	1/4W J
R2054	R2ESPJ221A	CARBO	220	1/4W J
R2055	R2ESPJ273A	CARBO	27k	1/4W J
R2056	R2ESPJ472A	CARBO	4.7k	1/4W J
R2057	R2ESPJ392A	CARBO	3.9k	1/4W J
R2058	R2ESPJ681A	CARBO	680	1/4W J
R2059	R2ESPJ561A	CARBO	560	1/4W J
R206	R2ESPJ561A	CARBO	560	1/4W J
R2060	R2ESPJ333A	CARBO	33k	1/4W J
R2061	R2ESPJ822A	CARBO	8.2k	1/4W J
R2062	R2ESPJ272A	CARBO	2.7k	1/4W J
R2063	R2ESPJ182A	CARBO	1.8k	1/4W J
R2064	R2ESPJ331A	CARBO	330	1/4W J
R2065	R2ESPJ273A	CARBO	27k	1/4W J
R2066	R2ESPJ682A	CARBO	6.8k	1/4W J
R2067	R2ESPJ471A	CARBO	470	1/4W J
R2068	R2ESPJ331A	CARBO	330	1/4W J
R2069	R2ESPJ102A	CARBO	1k	1/4W J
R207	R2ESPJ272A	CARBO	2.7k	1/4W J
R2070	R2ESPJ562A	CARBO	5.6k	1/4W J
R2071	R2ESPJ123A	CARBO	12k	1/4W J
R2072	R2ESPJ121A	CARBO	120	1/4W J
R2073	R2ESPJ103A	CARBO	10k	1/4W J
R2074	R2ESPJ332A	CARBO	3.3k	1/4W J
R2075	R2ESPJ333A	CARBO	33k	1/4W J
R2076	R2ESPJ103A	CARBO	10k	1/4W J
R2077	R2ESPJ392A	CARBO	3.9k	1/4W J
R2078	R2ESPJ823A	CARBO	82k	1/4W J
R2079	R2ESPJ103A	CARBO	10k	1/4W J
R208	R2ESPJ332A	CARBO	3.3k	1/4W J
R2081	R2ESPJ391A	CARBO	390	1/4W J
R2082	R2ESPJ471A	CARBO	470	1/4W J
R2083	R2ESPJ103A	CARBO	10k	1/4W J
R2084	R2ESPJ103A	CARBO	10k	1/4W J
R2085	R2ESPJ103A	CARBO	10k	1/4W J
R2086	R2ESPJ103A	CARBO	10k	1/4W J
R2087	R2ESPJ223A	CARBO	22k	1/4W J
R209	R2ESPJ103A	CARBO	10k	1/4W J
R210	R2ESPJ821A	CARBO	820	1/4W J
R211	R2ESPJ392A	CARBO	3.9k	1/4W J
R212	R2ESPJ102A	CARBO	1k	1/4W J
R213	R2ESPJ332A	CARBO	390	1/4W J
R215	R2ESPJ123A	CARBO	12k	1/4W J
R216	R2ESPJ471A	CARBO	470	1/4W J
R217	R2ESPJ392A	CARBO	3.9k	1/4W J
R218	R2ESPJ471A	CARBO	470	1/4W J
R219	R2ESPJ391A	CARBO	390	1/4W J
R220	R2ESPJ681A	CARBO	680	1/4W J
R221	R2ESPJ391A	CARBO	390	1/4W J
R222	R2ESPJ821A	CARBO	820	1/4W J
R223	R2ESPJ102A	CARBO	1k	1/4W J

Schematic Location	Part No.	Description		
R224	R2ESPJ471A	CARBO	470	1/4W J
R225	R2ESPJ103A	CARBO	10k	1/4W J
R226	R2ESPJ121A	CARBO	120	1/4W J
R227	R2ESPJ102A	CARBO	1k	1/4W J
R228	R2ESPJ123A	CARBO	12k	1/4W J
R229	R2ESPJ472A	CARBO	4.7k	1/4W J
R230	R2ESPJ152A	CARBO	1.5k	1/4W J
R231	R2ESPJ102A	CARBO	1k	1/4W J
R234	R2ESPJ822A	CARBO	8.2k	1/4W J
R235	R2ESPJ182A	CARBO	1.8k	1/4W J
R236	R2ESPJ563A	CARBO	56k	1/4W J
R237	R2ESPJ472A	CARBO	4.7k	1/4W J
R238	R2ESPJ332A	CARBO	3.3k	1/4W J
R239	R2ESPJ272A	CARBO	2.7k	1/4W J
R241	R2ESPJ472A	CARBO	4.7k	1/4W J
R242	R2ESPJ154A	CARBO	150k	1/4W J
R243	R2ESPJ154A	CARBO	150k	1/4W J
R244	R2ESPJ122A	CARBO	1.2k	1/4W J
R245	R2ESPJ221A	CARBO	220	1/4W J
R246	R2ESPJ562A	CARBO	5.6k	1/4W J
R247	R2ESPJ562A	CARBO	5.6k	1/4W J
R248	R2ESPJ681A	CARBO	680	1/4W J
R249	R2ESPJ681A	CARBO	680	1/4W J
R251	R2ESPJ220A	CARBO	22	1/4W J
R252	R2ESPJ101A	CARBO	100	1/4W J
R253	R2ESPJ222A	CARBO	2.2k	1/4W J
R254	R2ESPJ101A	CARBO	100	1/4W J
R255	R2ESPJ683A	CARBO	68k	1/4W J
R256	R2ESPJ393A	CARBO	39k	1/4W J
R258	R2ESPJ563A	CARBO	56k	1/4W J
R259	R2ESPJ223A	CARBO	22k	1/4W J
R260	R2ESPJ332A	CARBO	3.3k	1/4W J
R261	R2ESPJ471A	CARBO	470	1/4W J
R262	R2ESPJ471A	CARBO	470	1/4W J
R263	R2ESPJ471A	CARBO	470	1/4W J
R264	R2ESPJ121A	CARBO	120	1/4W J
R265	R2ESPJ471A	CARBO	470	1/4W J
R266	R2ESPJ103A	CARBO	10k	1/4W J
R267	R2ESPJ332A	CARBO	3.3k	1/4W J
R268	R2ESPJ332A	CARBO	3.3k	1/4W J
R269	R2ESPJ561A	CARBO	560	1/4W J
R271	R2ESPJ221A	CARBO	220	1/4W J
R272	R2ESPJ332A	CARBO	3.3k	1/4W J
R273	R2ESPJ332A	CARBO	3.3k	1/4W J
R274	R2ESPJ100A	CARBO	10	1/4W J
R275	R2ESPJ100A	CARBO	10	1/4W J
R281	R2ESPJ182A	CARBO	1.8k	1/4W J
R282	R2ESPJ101A	CARBO	100	1/4W J
R283	R2ESPJ681A	CARBO	680	1/4W J
R284	R2ESPJ222A	CARBO	2.2k	1/4W J
R285	R2ESPJ122A	CARBO	1.2k	1/4W J
R286	R2ESPJ222A	CARBO	2.2k	1/4W J
R288	R2ESPJ183A	CARBO	18k	1/4W J
R289	R2ESPJ102A	CARBO	1k	1/4W J
R290	R2ESPJ562A	CARBO	5.6k	1/4W J
R291	R2ESPJ221A	CARBO	220	1/4W J
R292	R2ESPJ273A	CARBO	27k	1/4W J
R293	R2ESPJ681A	CARBO	680	1/4W J
R294	R2ESPJ683A	CARBO	68k	1/4W J
R296	R2ESPJ222A	CARBO	2.2k	1/4W J
R297	R2ESPJ681A	CARBO	680	1/4W J
R298	R2ESPJ272A	CARBO	2.7k	1/4W J
R299	R2CDPJ155A	CARBO	1.5M	1/6W J
R301	R2ESPJ103A	CARBO	10k	1/4W J
R302	R2ESPJ102A	CARBO	1k	1/4W J
R303	R2ESPJ153A	CARBO	15k	1/4W J
R304	R2ESPJ224A	CARBO	220k	1/4W J
R305	R2ESPJ394A	CARBO	390k	1/4W J
R306	R2ESPJ392A	CARBO	3.9k	1/4W J
R307	R2ESPJ182A	CARBO	1.8k	1/4W J

Schematic Location	Part No.	Description
R308	R2ESPJ562A	CARBO 5.6k 1/4W J
R309	R2ESPJ182A	CARBO 1.8k 1/4W J
R311	R2ESPJ562A	CARBO 5.6k 1/4W J
R312	R2ESPJ332A	CARBO 3.3k 1/4W J
R313	R2ESPJ184A	CARBO 180k 1/4W J
R314	R2ESPJ471A	CARBO 470 1/4W J
R315	R2ESPJ471A	CARBO 470 1/4W J
R336	R2ESPJ103A	CARBO 10k 1/4W J
R337	R2ESPJ471A	CARBO 470 1/4W J
R338	R2ESPJ471A	CARBO 470 1/4W J
R339	R2ESPJ151A	CARBO 150 1/4W J
R341	R2ESPJ102A	CARBO 1k 1/4W J
R342	R2ESPJ182A	CARBO 1.8k 1/4W J
R343	R2ESPJ152A	CARBO 1.5k 1/4W J
R344	R2ESPJ391A	CARBO 390 1/4W J
R345	R2ESPJ681A	CARBO 680 1/4W J
R346	R2ESPJ821A	CARBO 820 1/4W J
R347	R2ESPJ681A	CARBO 680 1/4W J
R348	R2ESPJ222A	CARBO 2.2k 1/4W J
R349	R2ESPJ152A	CARBO 1.5k 1/4W J
R351	R2ESPJ821A	CARBO 820 1/4W J
R352	R2ESPJ331A	CARBO 330 1/4W J
R353	R2ESPJ392A	CARBO 3.9k 1/4W J
R354	R2ESPJ182A	CARBO 1.8k 1/4W J
R355	R2ESPJ151A	CARBO 150 1/4W J
R356	R2ESPJ680A	CARBO 68 1/4W J
R357	R2ESPJ100A	CARBO 10 1/4W J
R358	R2ESPJ151A	CARBO 150 1/4W J
R359	R2ESPJ560A	CARBO 56 1/4W J
R360	R2ESPJ750A	CARBO 75 1/4W J
R361	R2ESPJ103A	CARBO 10k 1/4W J
R362	R2ESPJ333A	CARBO 33k 1/4W J
R365	R2ESPJ122A	CARBO 1.2k 1/4W J
R366	R2ESPJ392A	CARBO 3.9k 1/4W J
(SWITCHES)		
SW201	4-2314-00290	SLIDE SW 4-2
SW202	4-2314-00280	SLIDE SW 2-3
(PINS)		
TP201	4-2374-00030	TEST POINT PIN
TP202	4-2374-00030	TEST POINT PIN
TP203	4-2374-00030	TEST POINT PIN
TP204	4-2374-00030	TEST POINT PIN
TP205	4-2374-00030	TEST POINT PIN
TP206	4-2374-00030	TEST POINT PIN
TP207	4-2374-00030	TEST POINT PIN
TP208	4-2374-00030	TEST POINT PIN
TP209	4-2374-00030	TEST POINT PIN
TP210	4-2374-00030	TEST POINT PIN
TP211	4-2374-00030	TEST POINT PIN
TP212	4-2374-00030	TEST POINT PIN
TP213	4-2374-00030	TEST POINT PIN
TP214	4-2374-00030	TEST POINT PIN
TP215	4-2374-00030	TEST POINT PIN
TP216	4-2374-00030	TEST POINT PIN
TP217	4-2374-00030	TEST POINT PIN
TP220	4-2374-00030	TEST POINT PIN
TP221	4-2374-00030	TEST POINT PIN
TP222	4-2374-00030	TEST POINT PIN
TP223	4-2374-00030	TEST POINT PIN
(VARIABLE RESISTORS)		
VR201	4-2224-00670	SEMI 10k Ω
VR202	4-2224-00430	SEMI 4.7k Ω
VR203	4-2224-00670	SEMI 10k Ω
VR204	4-2224-00670	SEMI 10k Ω
VR205	4-2224-00630	SEMI 1.5k Ω
VR206	4-2224-00610	SEMI 470 Ω
VR207	4-2224-00430	SEMI 4.7k Ω

Schematic Location	Part No.	Description
VR208	4-2224-00430	SEMI 4.7k Ω
VR209	4-2224-00670	SEMI 10k Ω
VR210	4-2224-00690	SEMI 22k Ω
VR211	4-2224-00670	SEMI 10k Ω
VR212	4-2224-00430	SEMI 4.7k Ω
VR214	4-2224-00640	SEMI 2.2k Ω
VR215	4-2224-00620	SEMI 1k Ω
X201	4-2254-00050	4.435M CRYSTAL
or	4-2254-00051	4.435M CRYSTAL
X202	4-2254-00040	4.433M CRYSTAL
or	4-2254-00041	4.433M CRYSTAL
	143-2-3504-02200	SHIELD CASE TOP HAB
AUDIO CIRCUIT PARTS		
Schematic Location	Part No.	Description
	0-4014-01100	AUDIO PC ASSY
(CAPACITORS)		
C401	C1ALEM107A	ELECT 100 μ F 10V M
C402	C1HLEM225A	ELECT 2.2 μ F 50V M
C403	C1HLEM474A	ELECT 0.47 μ F 50V M
C404	C1CLEM106A	ELECT 10 μ F 16V M
C405	C1ELEM475A	ELECT 4.7 μ F 25V M
C406	C1ALEM476A	ELECT 47 μ F 10V M
C407	C1ALEM226A	ELECT 22 μ F 10V M
C408	C1ELEM475A	ELECT 4.7 μ F 25V M
C409	C1ELEM475A	ELECT 4.7 μ F 25V M
C411	C1ALEM476A	ELECT 47 μ F 10V M
C412	C1ELEM475A	ELECT 4.7 μ F 25V M
C413	C1HFRJ822A	MYLAR 0.0082 μ F 50V J
C414	C1ALEM476A	ELECT 47 μ F 10V M
C415	C1HFRK682A	MYLAR 0.0068 μ F 50V K
C416	C1HFRK472A	MYLAR 0.0047 μ F 50V K
C417	C2AQRJ473A	PPCON 0.047 μ F 100V J
C418	C1HYDK152B	CERAM 0.0015 μ F 50V K
C419	C1HLEM105A	ELECT 1 μ F 50V M
C421	C1HFRJ392A	MYLAR 0.0039 μ F 50V K
C422	C1ALEM107A	ELECT 100 μ F 10V M
C423	C1HLEM105A	ELECT 1 μ F 50V M
C424	C1HYDK221B	CERAM 220pF 50V K
C425	C1ELEM475A	ELECT 4.7 μ F 25V M
C426	C1HFRJ183A	MYLAR 0.018 μ F 50V J
C427	C1CLEM106A	ELECT 10 μ F 16V M
C428	C1ALEM226A	ELECT 22 μ F 10V M
C429	C1HFRJ102A	MYLAR 0.001 μ F 50V J
C431	C1HYDK821B	CERAM 820pF 50V K
C432	C1HFRK103A	MYLAR 0.01 μ F 50V K
C481	C1HLEM105A	ELECT 1 μ F 50V M
C482	C1CLEM106A	ELECT 10 μ F 16V M
C483	C1ALEM107A	ELECT 100 μ F 10V M
C490	C1ALEM336A	ELECT 33 μ F 10V M
(DIODES)		
D401	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D402	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D403	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D404	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D405	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D406	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
(ICS)		
IC401	IGLA7042	IC LA7042

Schematic Location	Part No.	Description
L401	4-2554-00090	(COILS) INDUCTOR 22MH
L402	4-2594-00070	HOR. FREQ. TRAP COIL
L404	4-2724-E101K	INDUCTOR 100 μ H
L405	4-2594-00050	70KHz TRAP COIL
PV401	4-2364-00230	(PLUGS) 3P PLUG VERTICAL
PV402	4-2364-00220	2P PLUG VERTICAL
PV403	4-2364-00230	3P PLUG VERTICAL
PV404	4-2364-00220	2P PLUG VERTICAL
PV405	4-2364-00230	3P PLUG VERTICAL
PV406	4-2364-00230	3P PLUG VERTICAL
PV480	4-2364-00020	2P PLUG VERTICAL
Q401	TG2SA608SP	(TRANSISTORS) TR 2SA608SP(F) or (G)
Q402	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q403	TG2SD734	TR 2SD734(F) or (G)
Q404	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q405	TG2SD734	TR 2SD734(F) or (G)
Q406	TG2SA1016	TR 2SA1016(F) or (G)
Q407	TN2SC1845	TR 2SC1845(E) or (U)
Q408	TN2SC1845	TR 2SC1845(E) or (U)
Q481	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
Q482	TG2SC536SP	TR 2SC536SP(F) or (G)
or	TN2SC945	TR 2SC945(K) or (P)
R400 Δ	R2EZPJ100A	(RESISTORS) FUSE 10 1/4W J
R401	R2ESPJ473A	CARBO 47k 1/4W J
R402	R2ESPJ332A	CARBO 3.3k 1/4W J
R403	R2ESPJ153A	CARBO 15k 1/4W J
R404	R2ESPJ152A	CARBO 1.5k 1/4W J
R405	R2ESPJ273A	CARBO 27k 1/4W J
R406	R2ESPJ394A	CARBO 390k 1/4W J
R407	R2ESPJ103A	CARBO 10k 1/4W J
R408	R2ESPJ333A	CARBO 33k 1/4W J
R409	R2CDPJ225A	CARBO 2.2M 1/6W J
R410	R2ESPJ154A	CARBO 150k 1/4W J
R411	R2ESPJ102A	CARBO 1k 1/4W J
R412	R2ESPJ272A	CARBO 2.7k 1/4W J
R413	R2ESPJ104A	CARBO 100k 1/4W J
R414	R2ESPJ103A	CARBO 10k 1/4W J
R415	R2ESPJ103A	CARBO 10k 1/4W J
R416	R2ESPJ103A	CARBO 10k 1/4W J
R417	R2ESPJ122A	CARBO 1.2k 1/4W J
R418	R2ESPJ471A	CARBO 470 1/4W J
R419	R2ESPJ472A	CARBO 4.7k 1/4W J
R420	R2ESPJ121A	CARBO 120 1/4W J
R421	R2ESPJ183A	CARBO 18k 1/4W J
R422	R2ESPJ102A	CARBO 1k 1/4W J
R423	R2ESPJ471A	CARBO 470 1/4W J
R424	R2ESPJ333A	CARBO 33k 1/4W J
R425	R2ESPJ153A	CARBO 15k 1/4W J
R426	R2ESPJ47A	CARBO 4.7 1/4W J
R427	R2ESPJ470A	CARBO 47 1/4W J
R428	R2ESPJ563A	CARBO 56k 1/4W J
R429	R2ESPJ822A	CARBO 8.2k 1/4W J
R431	R2ESPJ100A	CARBO 10 1/4W J
R432	R2ESPJ183A	CARBO 18k 1/4W J
R433	R2ESPJ332A	CARBO 3.3k 1/4W J
R434	R2ESPJ682A	CARBO 6.8k 1/4W J
R435	R2ESPJ184A	CARBO 180k 1/4W J
R436	R2ESPJ560A	CARBO 56 1/4W J
R437	R2ESPJ221A	CARBO 220 1/4W J
R438	R2ESPJ563A	CARBO 56k 1/4W J
R439	R2ESPJ332A	CARBO 3.3k 1/4W J
R441	R2ESPJ103A	CARBO 10k 1/4W J
R442	R2ESPJ103A	CARBO 10k 1/4W J

Schematic Location	Part No.	Description
R443	R2ESPJ333A	CARBO 33k 1/4W J
R444	R2ESPJ272A	CARBO 2.7k 1/4W J
R445	R2ESPJ100A	CARBO 10 1/4W J
R481	R2ESPJ223A	CARBO 22k 1/4W J
R482	R2ESPJ333A	CARBO 33k 1/4W J
R483	R2ESPJ103A	CARBO 10k 1/4W J
R484	R2ESPJ103A	CARBO 10k 1/4W J
R485	R2ESPJ273A	CARBO 27k 1/4W J
R486	R2ESPJ473A	CARBO 47k 1/4W J
R487	R2ESPJ683A	CARBO 68k 1/4W J
R488	R2ESPJ102A	CARBO 1k 1/4W J
R489	R2ESPJ332A	CARBO 3.3k 1/4W J
R490	R2ESPJ102A	CARBO 1k 1/4W J
T401	4-2584-00110	70KHz OSC TRANSFORMER
TP401	4-2374-00030	(PINS) TEST POINT PIN
TP402	4-2374-00030	TEST POINT PIN
TP403	4-2374-00030	TEST POINT PIN
TP404	4-2374-00030	TEST POINT PIN
TP405	4-2374-00030	TEST POINT PIN
TP406	4-2374-00030	TEST POINT PIN
TP407	4-2374-00030	TEST POINT PIN
TP408	4-2374-00030	TEST POINT PIN
VR401	4-2224-00690	(VARIABLE RESISTORS) SEMI 22kB
VR402	4-2224-00600	SEMI 220kB
VR403	4-2224-00470	SEMI 220kB
SYSTEM CONTROL SERVO P.C.B. PARTS		
Schematic Location	Part No	Description
	0-4014-01112	SYS CON SERVO PC ASSY
		(CAPACITORS)
C501	C1ALEM477A	ELECT 470 μ F 10V M
C502	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C503	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C504	C1CLEM227A	ELECT 220 μ F 16V M
C505	C1EBDK473SR	SEMI 0.047 μ F 25V K
C507	C1EBDK473SR	SEMI 0.047 μ F 25V K
C508	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C509	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C511	C1EBDK473SR	SEMI 0.047 μ F 25V K
C512	C1HYDK102B	CERAM 0.001 μ F 50V K
C514	C1CLEM226A	ELECT 22 μ F 16V M
C515	C1HYDK221B	CERAM 220pF 50V K
C516	C1HYDK221B	CERAM 220pF 50V K
C517	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C518	C1EBDK473SR	SEMI 0.047 μ F 25V K
C519	C1CLEM226A	ELECT 22 μ F 16V M
C521	C1HLEM105A	ELECT 1 μ F 50V M
C523	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C524	C1CLEM226A	ELECT 22 μ F 16V M
C525	C1CLEM226A	ELECT 22 μ F 16V M
C532	C1CLEM107A	ELECT 100 μ F 16V M
C701	C1HFRK472A	MYLAR 0.0047 μ F 50V K
C702	C1HFRK102A	MYLAR 0.001 μ F 50V K
C703	C1HFRK472A	MYLAR 0.0047 μ F 50V K
C705	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C706	C1EUEK224A	ALSIK 0.22 μ F 25V K
C707	C1HFRK473A	MYLAR 0.047 μ F 50V K
C708	C1HFRK223A	MYLAR 0.022 μ F 50V K
C709	C1HFRK682A	MYLAR 0.0068 μ F 50V K
C710	C1ALEM336A	ELECT 33 μ F 10V M
C711	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C712	C1HYDK103B	CERAM 0.01 μ F 50V K
C713	C1HLEM335A	ELECT 3.3 μ F 50V M

Schematic Location	Part No.	Description
C714	C1CLEM106A	ELECT 10 μ F 16V M
C715	C1HQRJ473A	PMCON 0.047 μ F 50V J
C716	C1HFRK473A	MYLAR 0.047 μ F 50V K
C717	C1HLEM474A	ELECT 0.47 μ F 50V M
C718	C1HFRK683A	MYLAR 0.068 μ F 50V K
C719	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C720	C1EBDK473SR	SEMI 0.047 μ F 25V K
C721	C1HYDK103B	CERAM 0.01 μ F 50V K
C722	C1CTCK475A	TANTA 4.7 μ F 16V K
C723	C1ELEM475A	ELECT 4.7 μ F 25V M
C724	C1ELEM475A	ELECT 4.7 μ F 25V M
C725	C1ELEM475A	ELECT 4.7 μ F 25V M
C726	C1ELEM107A	ELECT 100 μ F 25V M
C727	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C728	C1EBDK473SP	SEMI 0.047 μ F 25V K
C729	C1EBDK473SP	SEMI 0.047 μ F 25V K
C731	C1EBDK473SP	SEMI 0.047 μ F 25V K
C732	C1HLEM105A	ELECT 1 μ F 50V M
C733	C1HLEM335A	ELECT 3.3 μ F 50V M
C734	C1HLEM105A	ELECT 1 μ F 50V M
C735	C1EUEK154A	ALSIC 0.15 μ F 25V K
C736	C1HFRK473A	MYLAR 0.047 μ F 50V K
C737	C1HYDK102B	CERAM 0.001 μ F 50V K
C738	C1HFRJ683A	MYLAR 0.068 μ F 50V J
C739	C1CLEM107A	ELECT 100 μ F 16V M
C741	C1HFRK104A	MYLAR 0.1 μ F 50V K
C742	C1HCDJ101SL	CERAM 100pF 50V J
C744	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C745	C1CLEM106A	ELECT 10 μ F 16V M
C746	C1HFRK473A	MYLAR 0.047 μ F 50V K
C747	C1HFRK473A	MYLAR 0.047 μ F 50V K
C748	C1HCDJ101SL	CERAM 100pF 50V J
C749	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C751	C1CLEM476A	ELECT 47 μ F 16V M
C752	C1CLEM106A	ELECT 10 μ F 16V M
C753	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C755	C1HFRK102A	MYLAR 0.001 μ F 50V K
C756	C1HYDK472B	CERAM 0.0047 μ F 50V K
C757	C1HLEM105A	ELECT 1 μ F 50V M
C758	C1HFRK473A	MYLAR 0.047 μ F 50V K
C759	C1ALEM107A	ELECT 100 μ F 10V M
C761	C1HLEM105A	ELECT 1 μ F 50V M
C762	C1HLEM105A	ELECT 1 μ F 50V M
C763	C1HYDK103B	CERAM 0.01 μ F 50V K
C772	C1HFRK682A	MYLAR 0.0068 μ F 50V K
C773	C1ALEM336A	ELECT 33 μ F 10V M
C774	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C775	C1HYDK103B	CERAM 0.01 μ F 50V K
C776	C1CLEM106A	ELECT 10 μ F 16V M
C777	C1HLEM335A	ELECT 3.3 μ F 50V M
C778	C1HQRJ473A	PMCON 0.047 μ F 50V J
C779	C1HFRK473A	MYLAR 0.047 μ F 50V K
C781	C1CLEM226A	ELECT 22 μ F 16V M
C782	C1HFRK683A	MYLAR 0.068 μ F 50V K
C783	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C784	C1HYDK103B	CERAM 0.01 μ F 50V K
C785	C1CTCK475A	TANTA 4.7 μ F 16V K
C786	C1HLEM335A	ELECT 3.3 μ F 50V M
C787	C1HYDK103B	CERAM 0.01 μ F 50V K
C788	C1HYDK103B	CERAM 0.01 μ F 50V K
(DIODES)		
D501	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D502	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D503	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D504	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133

Schematic Location	Part No.	Description
D507	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D508	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D510	GGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D511	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D518	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D519	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D521	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D522	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D523	DGDS442	DIODE DS442
D701	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D702	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D704	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D705	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D708	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D709	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D710	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D715	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D716	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D717	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D718	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D719	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D721	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D722	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D723	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D724	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D725	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D727	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D728	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D734	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D740	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D746	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D747	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D751	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133

Schematic Location	Part No.	Description
D752 or D753 or D765 or D767 or D768 or D769 or	DGGMA01-L DY1SS133 DGGMA01-L DY1SS133 DGGMA01-L DY1SS133 DGGMA01-L DY1SS133 DGGMA01-L DY1SS133 DGGMA01-L DY1SS133	DIODE GMA01-L DIODE 1SS133 DIODE GMA01-L DIODE 1SS133 DIODE GMA01-L DIODE 1SS133 DIODE GMA01-L DIODE 1SS133 DIODE GMA01-L DIODE 1SS133 DIODE GMA01-L DIODE 1SS133
IC501 IC502 IC503 IC504 IC701 IC702 or IC703 or IC704 IC705 IC706 IC707 IC709	IGLM6402H-238 IYBA6304A IGLM6416E-239 IGSTK6962 IXMSL9378RS IGLC4013B IN μ PD4013BC IGLC4081B IN μ PD4081C IHHA11749 IGLB1620 IHHA11747ANT IYBA6305 IHHA11749	IC LM6402H IC BA6304A IC LM6416E IC STK6962 IC MSL9378RS IC LC4013B IC μ PD4013BC IC LC4081B IC μ PD4081C IC HA11749 IC LB1620 IC HA11747ANT IC BA6305 IC HA11749
PV501 PV502 PV504 PV505 PV506 PV507 PV508 PV509 PV510 PV511 PV512 PV513 PV516 PV701 PV702 PV703 PV704 PV705	4-2364-00250 4-2364-00270 4-2364-00220 4-2364-00230 4-2364-00220 4-2364-00220 4-2364-00240 4-2364-00220 4-2364-00220 4-2364-00220 4-2364-00220 4-2364-00230 4-2364-00230 4-2364-00470 4-2364-00310 4-2364-00240 4-2364-00220 4-2364-00270	5P PLUG VERTICAL 7P PLUG VERTICAL 2P PLUG VERTICAL 3P PLUG VERTICAL 2P PLUG VERTICAL 2P PLUG VERTICAL 4P PLUG VERTICAL 2P PLUG VERTICAL 2P PLUG VERTICAL 2P PLUG VERTICAL 2P PLUG VERTICAL 3P PLUG VERTICAL 3P PLUG VERTICAL 7P PLUG VERTICAL 11P PLUG VERTICAL 4P PLUG VERTICAL 2P PLUG VERTICAL 7P PLUG VERTICAL
PW701 PW702	0-4059-01036 0-4059-09055	1P CORD ASSY P-P 1P CORD ASSY P-P
Q501 or Q502 or Q503 or Q504 or Q505 or Q506 or Q507 Q508 or Q509 or	TG2SC536SP TN2SC945 TG2SC536SP TN2SC945 TG2SC536SP TN2SC945 TG2SC536SP TN2SC945 TG2SC536SP TN2SC945 TG2SA608SP TG2SC536SP TN2SC945 TG2SC536SP TN2SC945	TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SA608SP(F) or (G) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P)

(ICS)

(PLUGS)

(TRANSISTORS)

Schematic Location	Part No.	Description
Q510 or Q511 Q512 Q513 Q514 Q517 Q701 Q702 Q703 or Q704 Q709 or Q712 Q716 Q717 Q718 or Q719	TG2SC536SP TN2SC945 TG2SA608SP TG2SA608SP TG2SA608SP TG2SA608SP TYDTA144N TYDTC124N TG2SA608SP TG2SC536SP TN2SC945 TG2SA608SP TG2SC536SP TN2SC945 TYDTC124N TYDTC124N TYDTC124N TG2SC536SP TN2SC945 TYDTC124N	TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SA608SP(F) or (G) TR 2SA608SP(F) or (G) TR 2SA608SP(F) or (G) TR 2SA608SP(F) or (G) TR DTA144N TR DTC124N TR 2SA608SP(G) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR 2SA608SP(F) or (G) TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR DTC124N TR DTC124N TR DTC124N TR 2SC536SP(F) or (G) TR 2SC945(K) or (P) TR DTC124N
R501 R502 R503 R504 R505 R506 R507 R508 R509 R511 R512 R513 R514 R515 R516 R517 R518 R519 R521 R522 R523 R525 R526 R527 R528 R532 R533 R535 R536 R537 R538 R539 R541 R542 R543 R544 R545 R546 R547 R548 R549 R551 R552 R555 R556 R557 R559 R561 R562	R2ESPJ684A R2ESPJ684A R2ESPJ104A R2ESPJ104A R2ESPJ561A R2ESPJ103A R2ESPJ103A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ103A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2CDPJ125A R2ESPJ104A R2ESPJ121A R2ESPJ223A R2ESPJ153A R2BNPC4991D R2BNPC8661D R2ESPJ104A R2ESPJ683A R2ESPJ102A R2ESPJ223A R2ESPJ102A R2ESPJ102A R2ESPJ273A R2ESPJ273A R2ESPJ103A R2ESPJ392A R2ESPJ103A R2ESPJ103A R2ESPJ222A R2ESPJ222A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ104A R2ESPJ153A R2ESPJ103A R2ESPJ223A	CARBO 680k 1/4W J CARBO 680k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 560 1/4W J CARBO 10k 1/4W J CARBO 10k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 10k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 10k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 10k 1/4W J CARBO 1.2M 1/6W J CARBO 100k 1/4W J CARBO 120 1/4W J CARBO 22k 1/4W J CARBO 15k 1/4W J METAL 4.99K 1/8W C METAL 8.66K 1/8W C CARBO 100k 1/4W J CARBO 68k 1/4W J CARBO 1k 1/4W J CARBO 22k 1/4W J CARBO 1k 1/4W J CARBO 1k 1/4W J CARBO 27k 1/4W J CARBO 27k 1/4W J CARBO 10k 1/4W J CARBO 3.9k 1/4W J CARBO 10k 1/4W J CARBO 10k 1/4W J CARBO 10k 1/4W J CARBO 2.2k 1/4W J CARBO 2.2k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 100k 1/4W J CARBO 15k 1/4W J CARBO 10k 1/4W J CARBO 22k 1/4W J

(RESISTORS)

Schematic Location	Part No.	Description
R563	R2ESPJ471A	CARBO 470 1/4W J
R564	R2ESPJ682A	CARBO 6.8k 1/4W J
R565	R2ESPJ223A	CARBO 22k 1/4W J
R566	R2ESPJ223A	CARBO 22k 1/4W J
R567	R2ESPJ561A	CARBO 560 1/4W J
R568	R2ESPJ105A	CARBO 1M 1/4W J
R569	R2ESPJ103A	CARBO 10k 1/4W J
R571	R2ESPJ104A	CARBO 100k 1/4W J
R572	R2ESPJ104A	CARBO 100k 1/4W J
R573	R2ESPJ103A	CARBO 10k 1/4W J
R574	R2ESPJ391A	CARBO 390 1/4W J
R575	R2ESPJ181A	CARBO 180 1/4W J
R576	R2ESPJ222A	CARBO 2.2k 1/4W J
R577	R2ESPJ222A	CARBO 2.2k 1/4W J
R579	R2ESPJ563A	CARBO 56k 1/4W J
R581	R2ESPJ101A	CARBO 100 1/4W J
R582	R2ESPJ101A	CARBO 100 1/4W J
R584	R2ESPJ101A	CARBO 100 1/4W J
R585	R2ESPJ101A	CARBO 100 1/4W J
R586	R2ESPJ101A	CARBO 100 1/4W J
R589	R2ESPJ822A	CARBO 8.2k 1/4W J
R591	R2ESPJ222A	CARBO 2.2k 1/4W J
R592	R2ESPJ562A	CARBO 5.6k 1/4W J
R593	R2ESPJ103A	CARBO 10k 1/4W J
R594	R2ESPJ682A	CARBO 6.8k 1/4W J
R595	R2ESPJ472A	CARBO 4.7k 1/4W J
R596	R2ESPJ472A	CARBO 4.7k 1/4W J
R598	R2ESPJ103A	CARBO 10k 1/4W J
R599	R2ESPJ103A	CARBO 10k 1/4W J
R601	R2ESPJ103A	CARBO 10k 1/4W J
R602	R2ESPJ222A	CARBO 2.2k 1/4W J
R603	R2ESPJ392A	CARBO 3.9k 1/4W J
R604	R2ESPJ101A	CARBO 100 1/4W J
R605	R2ESPJ101A	CARBO 100 1/4W J
R606	R2ESPJ103A	CARBO 10k 1/4W J
R607	R2ESPJ821A	CARBO 820 1/4W J
R608	R2ESPJ152A	CARBO 1.5k 1/4W J
R701	R2ESPJ273A	CARBO 27k 1/4W J
R702	R2ESPJ823A	CARBO 82k 1/4W J
R703	R2ESPJ103A	CARBO 10k 1/4W J
R704	R2ESPJ223A	CARBO 22k 1/4W J
R709	R2CDPJ155A	CARBO 1.5M 1/6W J
R710	R2ESPJ104A	CARBO 100k 1/4W J
R711	R2ESPJ104A	CARBO 100k 1/4W J
R712	R2ESPJ104A	CARBO 100k 1/4W J
R713	R2ESPJ104A	CARBO 100k 1/4W J
R714	R2ESPJ103A	CARBO 10k 1/4W J
R715	R2ESPJ472A	CARBO 4.7k 1/4W J
R716	R2ESPJ223A	CARBO 22k 1/4W J
R717	R2ESPJ472A	CARBO 4.7k 1/4W J
R718	R2ESPJ124A	CARBO 120k 1/4W J
R719	R2ESPJ473A	CARBO 47k 1/4W J
R721	R2ESPJ103A	CARBO 10k 1/4W J
R722	R2ESPJ103A	CARBO 10k 1/4W J
R723	R2ESPJ101A	CARBO 100 1/4W J
R724	R2ESPJ222A	CARBO 2.2k 1/4W J
R725	R2ESPJ392A	CARBO 3.9k 1/4W J
R726	R2ESPJ273A	CARBO 27k 1/4W J
R727	R2ESPJ390A	CARBO 39 1/4W J
R728	R2ESPJ101A	CARBO 100 1/4W J
R729	R2ESPJ102A	CARBO 1k 1/4W J
R731	R2ESPJ102A	CARBO 1k 1/4W J
R732	R2ESPJ154A	CARBO 150k 1/4W J
R733	R2ESPJ224A	CARBO 220k 1/4W J
R734	R2ESPJ224A	CARBO 220k 1/4W J
R735	R2ESPJ563A	CARBO 56k 1/4W J
R736	R2ESPJ123A	CARBO 12k 1/4W J
R737	R2ESPJ472A	CARBO 4.7k 1/4W J
R738	R2ESPJ123A	CARBO 12k 1/4W J
R739	R2ESPJ100A	CARBO 10 1/4W J

Schematic Location	Part No.	Description
R741	R2ESPJ100A	CARBO 10 1/4W J
R742	R2ESPJ100A	CARBO 10 1/4W J
R743	R2ESPJ333A	CARBO 33k 1/4W J
R744	R2ESPJ471A	CARBO 470 1/4W J
R745	R2ESPJ471A	CARBO 470 1/4W J
R746	R2HNPKR47A	METAL 0.47 1/2W K
R747	R2ESPJ105A	CARBO 1M 1/4W J
R748	R2ESPJ562A	CARBO 5.6k 1/4W J
R749	R2ESPJ103A	CARBO 10k 1/4W J
R751	R2ESPJ223A	CARBO 22k 1/4W J
R752	R2ESPJ104A	CARBO 100k 1/4W J
R753	R2ESPJ473A	CARBO 47k 1/4W J
R754	R2ESPJ473A	CARBO 47k 1/4W J
R755	R2ESPJ102A	CARBO 1k 1/4W J
R756	R2ESPJ754A	CARBO 750k 1/4W J
R757	R2ESPJ105A	CARBO 1M 1/4W J
R763	R2ESPJ274A	CARBO 270k 1/4W J
R768	R2ESPJ103A	CARBO 10k 1/4W J
R769	R2ESPJ153A	CARBO 15k 1/4W J
R771	R2ESPJ821A	CARBO 820 1/4W J
R772	R2ESPJ821A	CARBO 820 1/4W J
R776	R2ESPJ102A	CARBO 1k 1/4W J
R777	R2ESPJ104A	CARBO 100k 1/4W J
R779	R2ESPJ562A	CARBO 5.6k 1/4W J
R781	R2ESPJ332A	CARBO 3.3k 1/4W J
R783	R2ESPJ223A	CARBO 22k 1/4W J
R784	R2ESPJ223A	CARBO 22k 1/4W J
R787	R2ESPJ105A	CARBO 1M 1/4W J
R788	R2ESPJ223A	CARBO 22k 1/4W J
R789	R2ESPJ472A	CARBO 4.7k 1/4W J
R791	R2ESPJ221A	CARBO 220 1/4W J
R792	R2ESPJ182A	CARBO 1.8k 1/4W J
R794	R2ESPJ103A	CARBO 10k 1/4W J
R795	R2ESPJ103A	CARBO 10k 1/4W J
R796	R2ESPJ472A	CARBO 4.7k 1/4W J
R797	R2ESPJ562A	CARBO 5.6k 1/4W J
R798	R2ESPJ102A	CARBO 1k 1/4W J
R799	R2ESPJ103A	CARBO 10k 1/4W J
R801	R2ESPJ334A	CARBO 330k 1/4W J
R802	R2ESPJ331A	CARBO 330 1/4W J
R803	R2ESPJ222A	CARBO 2.2k 1/4W J
R804	R2ESPJ101A	CARBO 100 1/4W J
R805	R2ESPJ392A	CARBO 3.9k 1/4W J
R819	R2ESPJ152A	CARBO 1.5k 1/4W J
R823	R2ESPJ822A	CARBO 8.2k 1/4W J
R824	R2ESPJ223A	CARBO 22k 1/4W J
R825	R2ESPJ562A	CARBO 4.7k 1/4W J
R826	R2ENPF4701K	METAL 4.70k 1/4W F
R827	R2ENPF2201K	METAL 2.20k 1/4W F
R829	R2ESPJ104A	CARBO 100k 1/4W J
R830	R2ESPJ221A	CARBO 220 1/4W J
R831	R2ESPJ104A	CARBO 100k 1/4W J
R832	R2ESPJ101A	CARBO 100 1/4W J
R833	R2ESPJ222A	CARBO 2.2k 1/4W J
R834	R2ESPJ272A	CARBO 2.7k 1/4W J
R835	R2ESPJ102A	CARBO 1k 1/4W J
R836	R2ESPJ103A	CARBO 10k 1/4W J
R837	R2ENPF4701K	METAL 4.70k 1/4W F
R838	R2ESPJ390A	CARBO 39 1/4W J
R839	R2ESPJ332A	CARBO 3.3k 1/4W J
R841	R2ESPJ102A	CARBO 1k 1/4W J
R842	R2ESPJ102A	CARBO 1k 1/4W J
R843	R2ESPJ333A	CARBO 33k 1/4W J
R844	R2ESPJ224A	CARBO 220k 1/4W J
R845	R2ESPJ224A	CARBO 220k 1/4W J
R846	R2ESPJ473A	CARBO 47k 1/4W J
R847	R2ESPJ123A	CARBO 12k 1/4W J
R848	R2ESPJ562A	CARBO 5.6k 1/4W J
R849	R2ESPJ123A	CARBO 12k 1/4W J
R850	R2ESPJ222A	CARBO 2.2k 1/4W J

TIMER P.C.B. PARTS

Schematic Location	Part No.	Description
R851	R2ESPJ103A	CARBO 10k 1/4W J
R852	R2ESPJ103A	CARBO 10k 1/4W J
R853	R2ESPJ102A	CARBO 1k 1/4W J
R858	R2ESPJ333A	CARBO 33k 1/4W J
R859	R2ESPJ333A	CARBO 33k 1/4W J
R861	R2ESPJ151A	CARBO 150 1/4W J
(PINS)		
TP501	4-2374-00030	TEST POINT PIN
TP701	4-2374-00030	TEST POINT PIN
TP702	4-2374-00030	TEST POINT PIN
TP703	4-2374-00030	TEST POINT PIN
TP704	4-2374-00030	TEST POINT PIN
TP705	4-2374-00030	TEST POINT PIN
TP706	4-2374-00030	TEST POINT PIN
TP707	4-2374-00030	TEST POINT PIN
(VARIABLE RESISTORS)		
VR702	4-2224-00460	SEMI 150k Ω
VR703	4-2224-00540	SEMI 150k Ω
VR704	4-2224-00470	SEMI 220k Ω
VR705	4-2224-00470	SEMI 220k Ω
VR706	4-2224-00550	SEMI 15k Ω
VR710	4-2224-00720	SEMI 330k Ω
VR713	4-2224-00450	SEMI 68k Ω
VR714	4-2224-00450	SEMI 68k Ω
VR715	4-2224-00770	SEMI 1.5k Ω
VR718	4-2224-00780	SEMI 4.7k Ω
VR719	4-2224-00580	VR 500k Ω X1
W4301	0-4052-00210	CORD ASSY
W4302	0-4052-00220	CORD ASSY
W4303	0-4057-00060	CORD ASSY
W4304	0-4057-00070	CORD ASSY
W4305	0-4057-00080	CORD ASSY
W4308	0-4052-00270	CORD ASSY
X501	4-2584-00041	CERAMIC RESONATOR
(ZENER DIODES)		
ZD501	DGGZA4.3Y	ZE DIODE GZA4.3Y
ZD702	DGGZA5.1Y	ZE DIODE GZA5.1Y
or	DYMTZ5.1B	ZE DIODE MTZ5.1B
TUNER RF CONVERTER P.C.B. PARTS		
Schematic Location	Part No.	Description
	0-4014-01090	REAR TERMINAL PC ASSY
	4-2374-00110	REAR TERMINAL BD.HAB-A-A
(PLUG)		
PH002	4-2364-00231	3P PLUG HORIZONTALLY
(RESISTOR)		
R001	R2ESPJ750A	CARBO 75 1/4W J
W4101	0-4049-00020	CORD ASSY
W4102	0-4052-00190	CORD ASSY
	0-4034-00050	WIRE SHIELD ASSY
	4-1154-03220	TUNER IF UNIT
	4-1164-02220	RF CONVERTER-A

Schematic Location	Part No.	Description
	0-4014-01130	TIMER PC ASSY
	143-2-3304-01700	BASE FILTER MTG-HAB
	143-2-5604-02100	SPACER LED-HAB
BR101	4-2214-00110	BLOCK RESIST 33kX8
or	4-2214-00111	BLOCK RESIST 33kX8
BR102	4-2214-00110	BLOCK RESIST 33kX8
or	4-2214-00111	BLOCK RESIST 33kX8
(CAPACITORS)		
C1002	C1EBDK473SR	SEMI 0.047 μ F 25V K
C1003	C1CGEM226A	ELECT 22 μ F 16V M
C1006	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1007	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1008	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1009	C1HCDJ101SL	CERAM 100pF 50V J
C1010	C1HCDJ101SL	CERAM 100pF 50V J
C1011	C1CLEM226A	ELECT 22 μ F 16V M
C1012	C1CGEM476A	ELECT 47 μ F 16V M
C1013	C1VGEM106A	ELECT 10 μ F 35V M
C1015	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1301	C1HGEM105A	ELECT 1 μ F 50V M
C1302	C1EBDK473SR	SEMI 0.047 μ F 25V K
C1303	C1HGEM225A	ELECT 2.2 μ F 50V M
C1305	C1HYDZ223F	CERAM 0.022 μ F 50V Z
C1306	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1307	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1308	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1309	C1HGEM225A	ELECT 2.2 μ F 50V M
C1310	C1HYDZ103F	CERAM 0.01 μ F 50V Z
C1311	C1HLEM226A	ELECT 22 μ F 50V M
CR101	4-2584-00021	CERAMIC RESONATOR
(DIODE)		
D1001	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1004	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1005	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1006	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1007	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1009	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1010	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1011	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1012	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1013	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1014	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1015	DFERB12-01	DIODE ERB12-01
or	DGDS135E	DIODE DS135E
D1016	DYLTZ-G15	LED LTZ-G15
D1021	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
D1309	DGGMA01	DIODE GMA01
or	DY1SS131	DIODE 1SS131
D1310	DGGMA01	DIODE GMA01
or	DY1SS131	DIODE 1SS131
D1311	DGGMA01	DIODE GMA01

Schematic Location	Part No.	Description
or D1312	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1313	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1314	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1315	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1316	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1317	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1318	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1319	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1320	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1321	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1322	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1323	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1324	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1329	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1330	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1331	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1332	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1333	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1334	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1335	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
or D1336	DY1SS131 DGGMA01	DIODE 1SS131 DIODE GMA01
D1337	DYSLR-54UR-H	LED SLR-54UR-H
D1338	DYSLR-54UR-H	LED SLR-54UR-H
D1339	DYSLR-54UR-H	LED SLR-54UR-H
D1340	DYSLR-54UR-H	LED SLR-54UR-H
D1341	DYSLR-54UR-H	LED SLR-54UR-H
D1342	DYSLR-54UR-H	LED SLR-54UR-H
D1343	DYSLR-54UR-H	LED SLR-54UR-H
D1344	DYSLR-54UR-H	LED SLR-54UR-H
D1350	DFERB12-01	DIODE ERB12-01
or D1351	DGDS135E DGGMA01-L	DIODE DS135E DIODE GMA01-L
or D1352	DY1SS133 DGGMA01	DIODE 1SS133 DIODE GMA01
or D1355	DY1SS131 DGGMA01-L	DIODE 1SS131 DIODE GMA01-L
or D1356	DY1SS133 DGGMA01-L	DIODE 1SS133 DIODE GMA01-L
FL101	4-2154-00040	DIGITRON
IC101	IGLC6502B-633	(ICS) IC LC6502B
IC131	IN μ PC1363C	IC μ PC1363C
PR101	4-2224-00840	12CH PRESET UNIT

Schematic Location	Part No.	Description
PV101	4-2364-00270	(PLUGS) 7P PLUG VERTICAL
PV102	4-2364-00270	7P PLUG VERTICAL
PV103	4-2364-00260	6P PLUG VERTICAL
PV104	4-2364-00230	3P PLUG VERTICAL
PV106	4-2364-00220	2P PLUG VERTICAL
PV131	4-2364-00280	8P PLUG VERTICAL
PV132	4-2364-00230	3P PLUG VERTICAL
PV133	4-2364-00220	2P PLUG VERTICAL
Q1001	TG2SA1345	(TRANSISTORS) DIGITAL TR 2SA1345
Q1002	TG2SA1345	DIGITAL TR 2SA1345
Q1003	TG2SA1345	DIGITAL TR 2SA1345
Q1004	TG2SC536NP	TR 2SC536NP(F)
Q1005	TG2SC536NP	TR 2SC536NP(F)
Q1007	TYDTA124N	DIGITAL TR DTA124N
Q1008	TYDTA124N	DIGITAL TR DTA124N
Q1301	TYDTC124N	TR DTC124N
Q1302	TG2SC2274	TR 2SC2274(F)
Q1303	TG2SC608NP	TR 2SC608NP(F)
Q1304	TG2SC536NP	TR 2SC536NP(E) or (F)
Q1305	TG2SC2274	TR 2SC2274(E) or (F)
Q1306	TG2SA984K	TR 2SA984K(E) or (F)
R1001	R2ESPJ333A	(RESISTORS) CARBO 33k 1/4W J
R1002	R2ESPJ333A	CARBO 33k 1/4W J
R1003	R2ESPJ333A	CARBO 33k 1/4W J
R1004	R2ESPJ333A	CARBO 33k 1/4W J
R1005	R2ESPJ103A	CARBO 10k 1/4W J
R1006	R2ESPJ103A	CARBO 10k 1/4W J
R1007	R2ESPJ103A	CARBO 10k 1/4W J
R1008	R2ESPJ103A	CARBO 10k 1/4W J
R1009	R2ESPJ333A	CARBO 33k 1/4W J
R1010	R2ESPJ393A	CARBO 39k 1/4W J
R1011	R2ESPJ104A	CARBO 100k 1/4W J
R1012	R2ESPJ223A	CARBO 22k 1/4W J
R1013	R2ESPJ824A	CARBO 820k 1/4W J
R1014	R2ESPJ104A	CARBO 100k 1/4W J
R1015	R2ESPJ333A	CARBO 33k 1/4W J
R1017	R2ESPJ563A	CARBO 56k 1/4W J
R1018	R2ESPJ473A	CARBO 47k 1/4W J
R1019	R2ESPJ223A	CARBO 22k 1/4W J
R1020	R2ESPJ223A	CARBO 22k 1/4W J
R1021	R2ESPJ223A	CARBO 22k 1/4W J
R1022	R2ESPJ223A	CARBO 22k 1/4W J
R1023	R2ESPJ223A	CARBO 22k 1/4W J
R1024	R2ESPJ223A	CARBO 22k 1/4W J
R1025	R2ESPJ223A	CARBO 22k 1/4W J
R1026	R2ESPJ223A	CARBO 22k 1/4W J
R1027	R2ESPJ333A	CARBO 33k 1/4W J
R1028	R2ESPJ105A	CARBO 1M 1/4W J
R1029	R2ESPJ222A	CARBO 2.2k 1/4W J
R1035	R2ESPJ391A	CARBO 390 1/4W J
R1036	R2ESPJ222A	CARBO 2.2k 1/4W J
R1301	R2ESPJ471A	CARBO 470 1/4W J
R1302	R2ESPJ102A	CARBO 1k 1/4W J
R1303	R2ESPJ104A	CARBO 100k 1/4W J
R1304	R2ESPJ223A	CARBO 22k 1/4W J
R1305	R2ESPJ104A	CARBO 100k 1/4W J
R1306	R2ESPJ103A	CARBO 10k 1/4W J
R1307	R2ESPJ154A	CARBO 150k 1/4W J
R1308	R2ESPJ563A	CARBO 56k 1/4W J
R1309	R2ESPJ563A	CARBO 56k 1/4W J
R1310	R2ESPJ123A	CARBO 12k 1/4W J
R1312	R2ESPJ333A	CARBO 33k 1/4W J
R1313	R2ESPJ103A	CARBO 10k 1/4W J
R1314	R2ESPJ273A	CARBO 27k 1/4W J
R1315	R2ESPJ102A	CARBO 1k 1/4W J
R1316	R2ESPJ472A	CARBO 4.7k 1/4W J

Schematic Location	Part No.	Description
R1317	R2ESPJ474A	CARBO 470k 1/4W J
R1318	R2ESPJ473A	CARBO 47k 1/4W J
R1319	R2ESPJ123A	CARBO 12k 1/4W J
R1320	R2ESPJ181A	CARBO 180 1/4W J
R1321	R2ESPJ561A	CARBO 560 1/4W J
R1322	R2ESPJ102A	CARBO 1k 1/4W J
R1325	R2ESPJ562A	CARBO 5.6k 1/4W J
R1326	R2ESPJ683A	CARBO 68k 1/4W J
R1327	R2ESPJ822A	CARBO 8.2k 1/4W J
R1328	R2ESPJ473A	CARBO 47k 1/4W J
(SWITCHES)		
S1001	4-2314-00400	KEY BOARD SW
S1002	4-2314-00400	KEY BOARD SW
S1003	4-2314-00400	KEY BOARD SW
S1004	4-2314-00400	KEY BOARD SW
S1005	4-2314-00400	KEY BOARD SW
S1006	4-2314-00400	KEY BOARD SW
S1007	4-2314-00400	KEY BOARD SW
S1301	4-2314-00400	KEY BOARD SW
S1302	4-2314-00400	KEY BOARD SW
S1303	4-2314-00400	KEY BOARD SW
S1304	4-2314-00400	KEY BOARD SW
S1305	4-2314-00400	KEY BOARD SW
S1306	4-2314-00400	KEY BOARD SW
S1307	4-2314-00400	KEY BOARD SW
S1308	4-2314-00400	KEY BOARD SW
S1309	4-2314-00400	KEY BOARD SW
S1310	4-2314-00400	KEY BOARD SW
S1311	4-2314-00400	KEY BOARD SW
S1312	4-2314-00400	KEY BOARD SW
S1313	4-2314-00410	MICRO SW (AFT)
(PINS)		
TP101	4-2374-00030	TEST POINT PIN
TP102	4-2374-00030	TEST POINT PIN
TP131	4-2374-00030	TEST POINT PIN
TP132	4-2374-00030	TEST POINT PIN
(ZENER DIODES)		
ZD101	DGGZA5.1-Y	ZE DIODE GZA5.1-Y
or	DYMTZ5.1-B	ZE DIODE MTZ5.1-B
ZD102	DGGZM20-B2	ZE DIODE GZM20-B2
or	DYMTZ20-D	ZE DIODE MTZ20-D
ZD131	DGGZA4.3-Y	ZE DIODE GZA4.3-Y
or	DMMA4043-H	ZE DIODE MA4043-H
ZD133	DHHZT33	ZE DIODE HZT33
or	DNμPC574J	ZE DIODE μPC574J
0030	0-4014-01160 IMDN6838	COUNTER PC ASSY HALL IC DN6838
W2201	0-4048-00160	CORD ASSY

POWER CIRCUIT P.C.B. PARTS

Schematic Location	Part No.	Description
	0-4014-01401 4-2354-00210	POWER A PC ASSY FUSE CLIP
(CAPACITORS)		
C901 ▲	C1EMRM473B-E	MYLAR 0.047μF 250V
C902 ▲	C1HYDZ472F	CERAM 0.0047μF 50V Z
C903 ▲	C1HYDZ472F	CERAM 0.0047μF 50V Z
C904 ▲	C1HYDZ472F	CERAM 0.0047μF 50V Z
C905 ▲	C1HYDZ472F	CERAM 0.0047μF 50V Z
C906 ▲	C1HYDK471B	CERAM 470pF 500V K
C907 ▲	C1HYDK471B	CERAM 470pF 500V K

Schematic Location	Part No.	Description
C908 ▲	C1HYDZ472F	CERAM 0.0047μF 50V Z
C909 ▲	C1HYDZ472F	CERAM 0.0047μF 50V Z
C911 ▲	C1VDGM001T	ELECT 3300μF 35V M
C912 ▲	C1HYDZ223F	CERAM 0.022μF 50V Z
C913	C1ELEM107A	ELECT 100μF 25V M
C914	C1ELEM107A	ELECT 100μF 25V M
C915	C1ELEM107A	ELECT 100μF 25V M
C916	C1ALEM476A	ELECT 47μF 10V M
C917 ▲	C1JREM227A	ELECT 220μF 63V M
C918 ▲	C1JREM106A	ELECT 10μF 63V M
C919 ▲	C1VLEM108A	ELECT 1000μF 35V M
C920	C1HYDZ472F	CERAM 0.0047μF 50V Z
C921	C1HYDZ223F	CERAM 0.022μF 50V Z
C922	COJLEM108A	ELECT 1000μF 6.3V M
C923	C1CLEM228A	ELECT 2200μF 16V M
C924	C1HLEM106A	ELECT 10μF 50V M
C925	C1HYDZ103F	CERAM 0.01μF 50V Z
C926	C1HYDZ103F	CERAM 0.01μF 50V Z
(DIODES)		
D901 ▲	DFERC04-02	DIODE ERC04-02
D902 ▲	DFERC04-02	DIODE ERC04-02
D903 ▲	DFERC04-02	DIODE ERC04-02
D904 ▲	DFERC04-02	DIODE ERC04-02
D905 ▲	DFERB12-02	DIODE ERB12-02
or	DGDS135D	DIODE DS135D
D906 ▲	DFERB12-02	DIODE ERB12-02
or	DGDS135D	DIODE DS135D
D907 ▲	DFERB12-02	DIODE ERB12-02
or	DGDS135D	DIODE DS135D
D908 ▲	DFERB12-02	DIODE ERB12-02
or	DGDS135D	DIODE DS135D
D909	DGGMA01-L	DIODE GMA01-L
or	DY1SS133	DIODE 1SS133
F901 ▲	4-2344-00070	FUSE T500MA SEMKO
F902 ▲	4-2344-00080	FUSE T3.15A SEMKO
F903 ▲	4-2344-00070	FUSE T500MA SEMKO
F904 ▲	4-2344-00070	FUSE T500MA SEMKO
F905 ▲	4-2344-00050	FUSE T100MA SEMKO
(PLUGS)		
PV901	4-2364-00030	3P PLUG VERTICAL
PV902	4-2364-00030	3P PLUG VERTICAL
PV904	4-2364-00050	5P PLUG VERTICAL
PV905	4-2364-00020	2P PLUG VERTICAL
PV906	4-2364-00060	6P PLUG VERTICAL
PV907	4-2364-00050	5P PLUG VERTICAL
PV909	4-2364-00020	2P PLUG VERTICAL
PV910	4-2364-00020	2P PLUG VERTICAL
(TRANSISTORS)		
Q901	TG2SD894	DARLINGTON TR 2SD894
Q902	TG2SA984	TR 2SA984(E) or (F)
Q903	TG2SC536NP	TR 2SC536NP(F) or (G)
Q904	TG2SC2274	TR 2SC2274(E) or (F)
or	TN2SC2002	TR 2SC2002(L) or (M)
Q905	TG2SC536NP	TR 2SC536NP(F) or (G)
(RESISTORS)		
R902	R3AXPJ152A	OMF 1.5k 1W J
R903	R2HDPJ682A	CARBO 6.8k 1/2W J
R904	R2ESPJ103A	CARBO 10k 1/4W J
R905	R2ESPJ333A	CARBO 33k 1/4W J
R906	R2ESPJ682A	CARBO 6.8k 1/4W J
R907	R2ESPJ103A	CARBO 10k 1/4W J
R909	R2ESPJ184A	CARBO 180k 1/4W J
R911	R2ESPJ184A	CARBO 180k 1/4W J
R912	R2ESPJ334A	CARBO 330k 1/4W J

Schematic Location	Part No.	Description
R913	R2ESPJ334A	CARBO 330k 1/4W J
R914	R2ESPJ563A	CARBO 56k 1/4W J
R915	R2ESPJ182A	CARBO 1.8k 1/4W J
R916	R2ESPJ333A	CARBO 33k 1/4W J
R917	R2ESPJ152A	CARBO 1.5k 1/4W J
R918	R2ESPJ473A	CARBO 47k 1/4W J
R919	R2ESPJ103A	CARBO 10k 1/4W J
ZD902 or	DFEQA02-35B DGGZA36-Y	(ZENER DIODES) ZE DIODE EQA02-35B ZE DIODE GZA36-Y
	0-4014-01410	POWER B PC ASSY
		(CAPACITORS)
C927	C1CLEM476A	ELECT 47 μ F 16V M
C928	C1CLEM476A	ELECT 47 μ F 16V M
C929	C1ELEM476A	ELECT 47 μ F 25V M
		(IC)
IC902	IGSTK5352	HYBRID IC STK5352
		(RESISTORS)
R921 Δ	R2HZPJ100A	FUSE 10 1/2W J
R922	R2ESPJ153A	CARBO 15k 1/4W J
W4401	0-4025-00460	CORD ASSY
Δ	0-4054-00090	POWER CORD ASSY EUR
or	0-4054-00091	POWER CORD ASSY EUR
Δ	143-2-3604-00500	INSULATOR SW COVER
IC901	IGSTK5322H	HYBRID IC STK5322H
T901 Δ	4-2514-00402	POWER TRANSFORMER

KEY FUNCTION P.C.B. PARTS

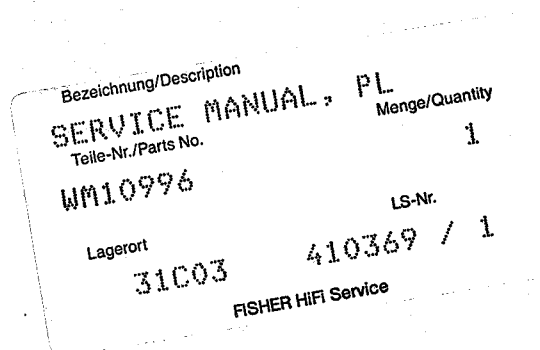
Schematic Location	Part No.	Description
	0-4014-01122	KEY FUNCTION PC ASSY
BR651 or or	4-2214-00030 4-2214-00031 4-2214-00032	SANYO 001 BLOCK R SANYO 001 BLOCK R SANYO 001 BLOCK R
		(DIODES)
D651	DYSLR-54UR	LED SLR-54UR
D652	DYSLR-54UR	LED SLR-54UR
D653	DYSLR-54UR	LED SLR-54UR
D654	DYSLR-34UR5F	LED SLR-34UR5F
D656	DYSLR-34UR5F	LED SLR-34UR5F
D657	DYSLR-34UR5F	LED SLR-34UR5F
		(PLUGS)
PV652	4-2364-00240	4P PLUG VERTICAL
PV653	4-2364-00280	8P PLUG VERTICAL
		(RESISTORS)
R651	R2ESPJ103A	CARBO 10k 1/4W J
R652	R2ESPJ122A	CARBO 1.2k 1/4W J
R653	R2ESPJ563A	CARBO 56k 1/4W J
R654	R2ESPJ391A	CARBO 390 1/4W J
R655	R2ESPJ391A	CARBO 390 1/4W J
R656	R2ESPJ391A	CARBO 390 1/4W J
R658	R2ESPJ391A	CARBO 390 1/4W J
R659	R2ESPJ391A	CARBO 390 1/4W J
R664	R2ESPJ563A	CARBO 56k 1/4W J

Schematic Location	Part No.	Description
		(SWITCHES)
S651	4-2314-00350	PUSH SW 3KEY
S652	4-2314-00310	KEY BOARD SW
S653	4-2314-00310	KEY BOARD SW
S655	4-2314-00310	KEY BOARD SW
S656	4-2314-00310	KEY BOARD SW
S657	4-2314-00310	KEY BOARD SW
S662	4-2314-00310	KEY BOARD SW
S662	4-2314-00310	KEY BOARD SW
S663	4-2314-00310	KEY BOARD SW
W4307	0-4052-00200	CORD ASSY

MUTE P.C.B. PARTS

Schematic Location	Part No.	Description
	0-4014-01080	MUTE PC ASSY
		(CAPACITORS)
C001	C1HLEM105A	ELECT 1 μ F 50V M
C002	C1HYDK681B	CERAM 680pF 50V K
C003	C1HLEM475A	ELECT 4.7 μ F 50V M
C004	C1HYDK103B	CERAM 0.01 μ F 50V K
C005	C1CLEM226A	ELECT 22 μ F 16V M
C006	C1HFRK473A	MYLAR 0.047 μ F 50V K
C007	C1HFRK333A	MYLAR 0.033 μ F 50V K
C008	C1HFRK103A	MYLAR 0.01 μ F 50V K
C009	C1HQRJ562A	PMCON 0.0056 μ F 50V J
C010	C1HFRK102A	MYLAR 0.001 μ F 50V K
C011	C1HFRK102A	MYLAR 0.001 μ F 50V K
C012	C1AAEM476A	ELECT 47 μ F 10V M
C013	C1HLEM474A	ELECT 0.47 μ F 50V M
		(DIODES)
D001 or	DGGMA01-L DY1SS133	DIODE GMA01-L DIODE 1SS133
D002 or	DGGMA01-L DY1SS133	DIODE GMA01-L DIODE 1SS133
D003 or	DGGMA01-L DY1SS133	DIODE GMA01-L DIODE 1SS133
D004 or	DGGMA01-L DY1SS133	DIODE GMA01-L DIODE 1SS133
D005 or	DGGMA01-L DY1SS133	DIODE GMA01-L DIODE 1SS133
		(ICS)
IC001	IGLA7808	IC LA7808
IC002	ITTC4030BP	IC TC4030BP
IC003	IGLA6358	IC LA6358
		(COILS)
L001	4-2724-E101K	INDUCTOR 100 μ H
L001	4-2724-R101K	INDUCTOR 100 μ H
		(PLUGS)
PV001	4-2364-00260	6P PLUG VERTICAL
PV002	4-2364-00290	9P PLUG VERTICAL
		(TRANSISTORS)
Q001 or	TG2SC536NP TN2SC945	TR 2SC536NP(F)or(G) TR 2SC945(K)or(P)
		(RESISTORS)
R001	R2ESPJ103A	CARBO 10k 1/4W J
R002	R2ESPJ221A	CARBO 220 1/4W J
R003	R2ESPJ334A	CARBO 330k 1/4W J
R004	R2ESPJ222A	CARBO 2.2k 1/4W J
R005	R2ESPJ333A	CARBO 33k 1/4W J

Schematic Location	Part No.	Description
R006	R2ESPJ472A	CARBO 4.7k 1/4W J
R007	R2ESPJ123A	CARBO 12k 1/4W J
R008	R2ESPJ153A	CARBO 15k 1/4W J
R009	R2ESPJ102A	CARBO 1k 1/4W J
R010	R2ESPJ183A	CARBO 18k 1/4W J
R011	R2ESPJ102A	CARBO 1k 1/4W J
R012	R2ESPJ104A	CARBO 100k 1/4W J
R013	R2ESPJ103A	CARBO 10k 1/4W J
R014	R2ESPJ223A	CARBO 22k 1/4W J
R015	R2ESPJ222A	CARBO 2.2k 1/4W J
R016	R2ESPJ332A	CARBO 3.3k 1/4W J
R017	R2ESPJ332A	CARBO 3.3k 1/4W J
R018	R2ESPJ472A	CARBO 4.7k 1/4W J
R019	R2ESPJ103A	CARBO 10k 1/4W J
R020	R2ESPJ103A	CARBO 10k 1/4W J
R021	R2ESPJ223A	CARBO 22k 1/4W J
R022	R2ESPJ563A	CARBO 56k 1/4W J
R023	R2ESPJ223A	CARBO 22k 1/4W J
R024	R2ESPJ103A	CARBO 10k 1/4W J
TP001	4-2374-00030	(PINS) TEST POINT PIN
TP002	4-2374-00030	TEST POINT PIN
TP003	4-2374-00030	TEST POINT PIN
VR001	4-2224-00250	(VARIABLE RESISTOR) SEMI 10kB



FISHER

Service/Ersatzteillager:
 FISHER HiFi Europa Vertriebs-GmbH
 Schönstraße 80, 8000 München 90
 Telefon 089/2379-1
 Telex 5-212384 D
 Wenden Sie sich bitte mit technischen
 Fragen an diese Adresse.

Verwaltung, Verkauf und Auslieferungslager:
 FISHER HiFi Europa Vertriebs-GmbH
 Truderingerstraße 13, 8000 München 80
 Telefon 089/4145-0
 Telex 5-24665 D
 5-24033 D

Printed in Japan
 '83/Oct. WM-10996 (2000)

SERVICE INFORMATION



FISHER®

VIDEO CASSETTE RECORDER

FVH-P615/P618/P620/D620
/P710/P711/P715/P716
/P720/P721/P722/P725
/P830 (For PAL)

IDLER REPLACEMENT

If the idler has to be replaced with the spare part, proceed as follows:

1. Detach the Top Cover. Remove the two screws (right and left) on the Top Cover.
2. Detach the Bottom Cover. Remove the eight fastening screws.
3. Detach the Take-Up Reel. See Fig. 1.
 - 3.1 Remove the stopper washer.
 - 3.2 Disengage the Subbrake Spring.
 - 3.3 Detach the Take-Up Reel by lifting it straight up.

Note: Do not to lose the washers for the Reel Shaft.

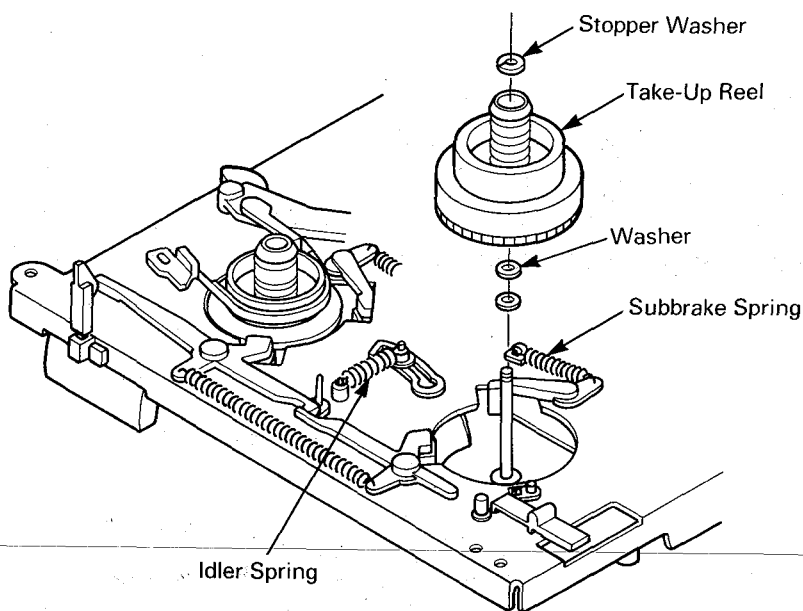


Fig. 1

4. Disengage the Idler Spring. See Fig. 1.

5. Disengage the Drive Belt. See Fig. 2.
 6. Disengage the Idler Arm Spring. See Fig. 2.
 7. Detach the Protector. See Fig. 2.
- Remove the one fastening screw and disconnect the arranged leads.

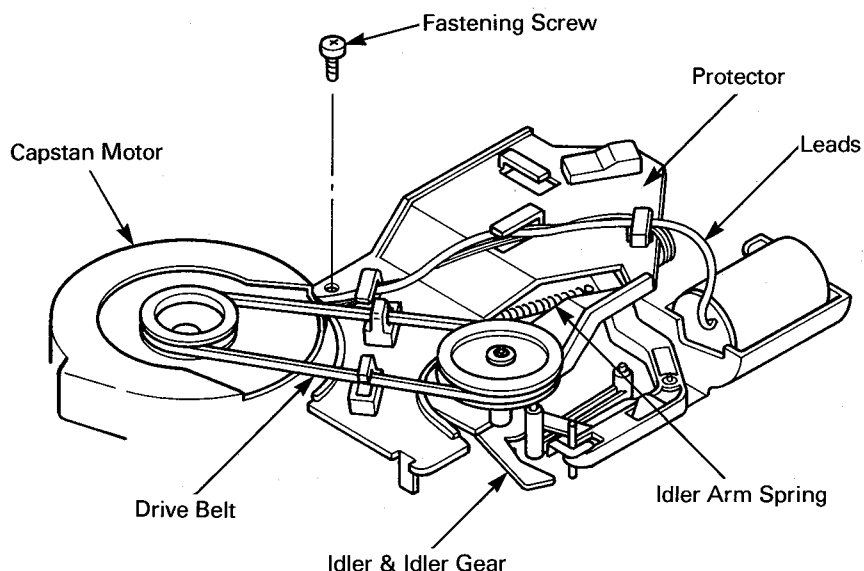


Fig. 2

8. Detach the Idler Gear.
- 8.1 Remove the stopper washer. See Fig. 3.
- 8.2 Remove the Idler Pulley. See Fig. 3.

Note: The Idler Gear should not be removed together with the Idler Pulley. Hold the main body of the Idler and remove the Pulley by lifting it straight up.

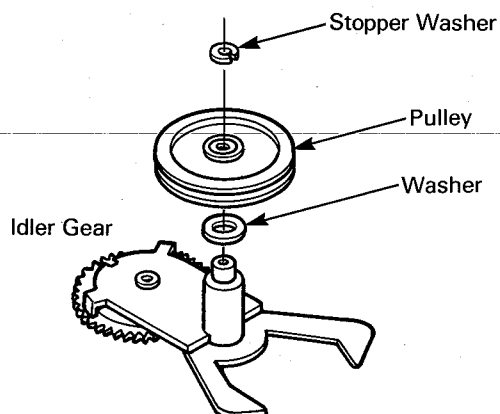


Fig. 3

8.3 Remove the Idler Gear. See Fig. 4.

As the Idler Gear touches the Reel Bracket, slightly bend the main body of the gear with both hands and quickly pull it out.

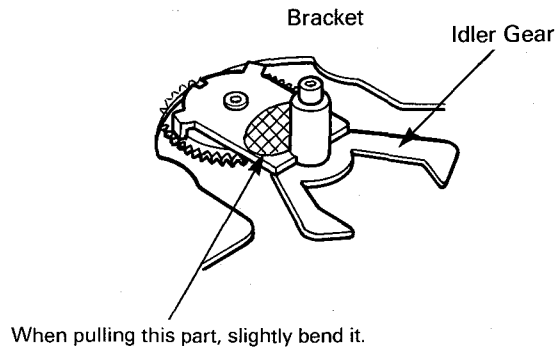


Fig. 4

NOTE:

The brackets having the serial number date codes later than 8516 are chamfered. Therefore, the idler gear can be smoothly pulled out without the idler gear being bent.

9. Detach the Idler. See Fig. 5.

9.1 Remove the Stopper Washer fastening Idler.

9.2 Move the Rubber Wheel toward the Take-Up Reel side. Remove it from the rail, and pull out Idler. Move the wheel and remove it from the rail.

Move the wheel and remove it from the rail.

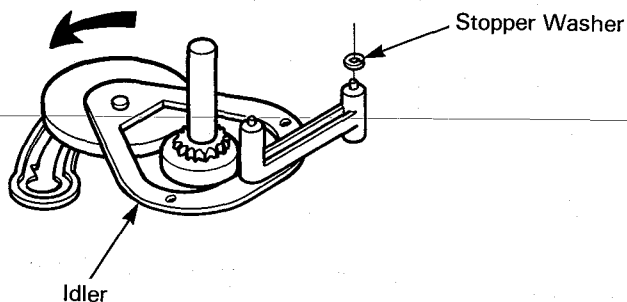


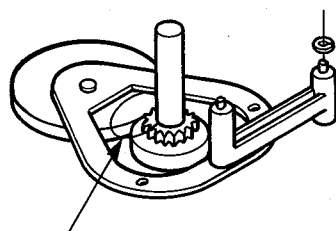
Fig. 5

ASSEMBLY PRECAUTIONS

Exercise the assembly procedures in the reverse order of the disassembly ones.

Note 1: Be sure to put the Idler Wheel in the rail.

Note 2: Be sure to engage the Rubber Wheel with Wheel on the shaft. See Fig. 6.
These parts should be engaged.



These parts should be engaged.

Fig. 6

Note 3: When the Idler Gear is pushed into the inside of the Bracket, slightly bend the main body of the Gear and insert the gear as quickly as possible. See Fig. 4.

Note 4: When the Idler Pulley is installed onto the Idler Gear Shaft, leave a little clearance between the Pulley and the Idler Gear Shaft. See Fig. 7.

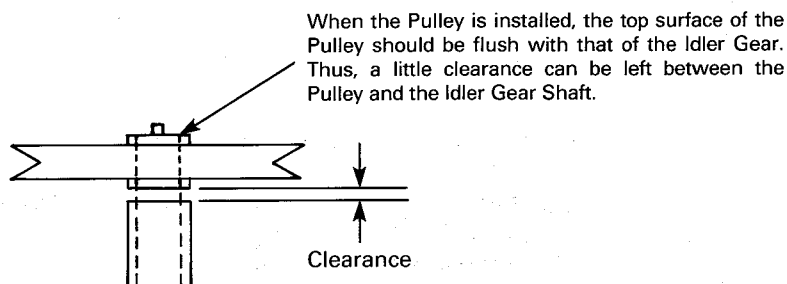


Fig. 7

* If the Pulley is incorrectly installed (no clearance), smooth rotation cannot be obtained, and CUE, REV, F.F., and REW malfunctions may be caused.

Note 5: Do not lose the washers and stopper washers for each shaft. Also, do not forget to install them.

FVH-P615

**SCHEMATIC DIAGRAM & PRINTED
CIRCUIT BOARD**

(EUROPE)

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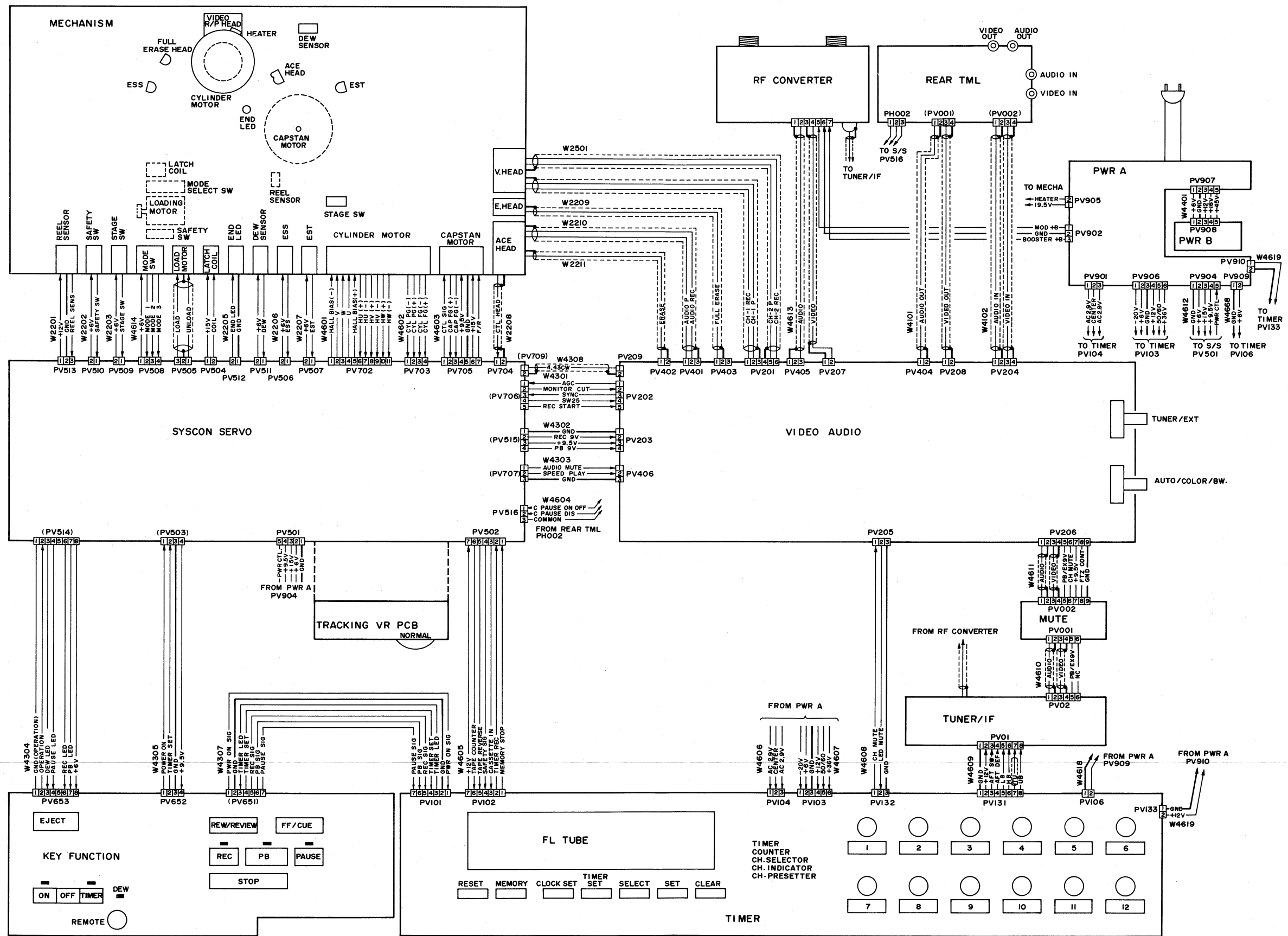
— PRODUCTION SAFETY NOTICE —

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF A UNIT. COMPONENTS INDICATED BY THE SYMBOL $\triangle$ IN THIS SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAVE SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE ATTACHED PARTS LIST BE USED FOR COMPONENT REPLACEMENT DESIGNATED BY THE SYMBOL.

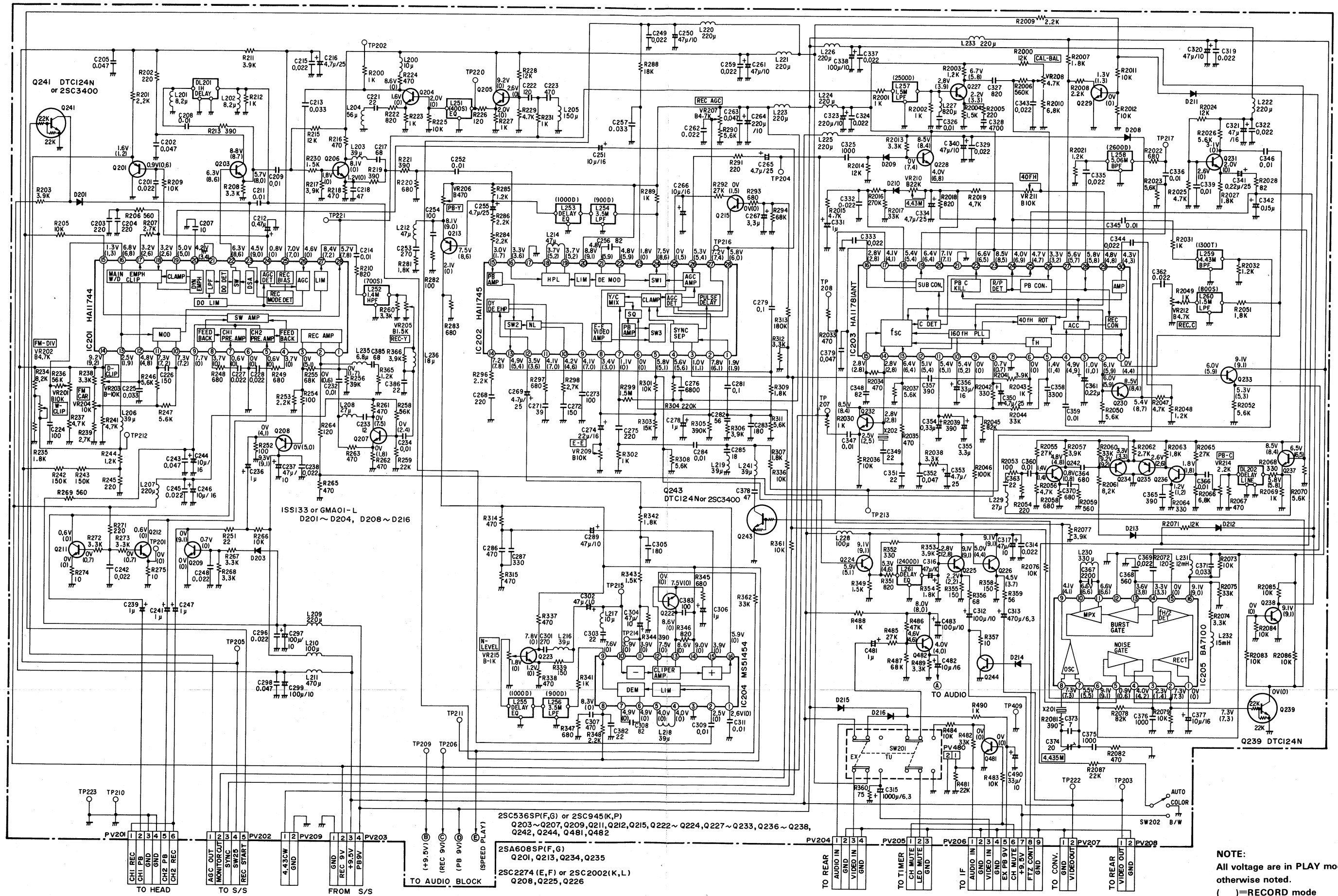
NOTES:

1. All resistance values in "OHMS" unless otherwise noted.
(K=1,000 M=1,000,000)
2. All inductance values in "mH" unless otherwise noted.
 μ =micro henry
3. Voltage reading may vary $\pm 20\%$
4. Unless otherwise noted in schematic diagram, all capacitors less than 1 are expressed in mfd (μ F) and the values larger than 1 are in pF.
5. This is a fundamental circuit diagram. Some production changes may be made without revision of the diagram.

OVER ALL WIRING DIAGRAM

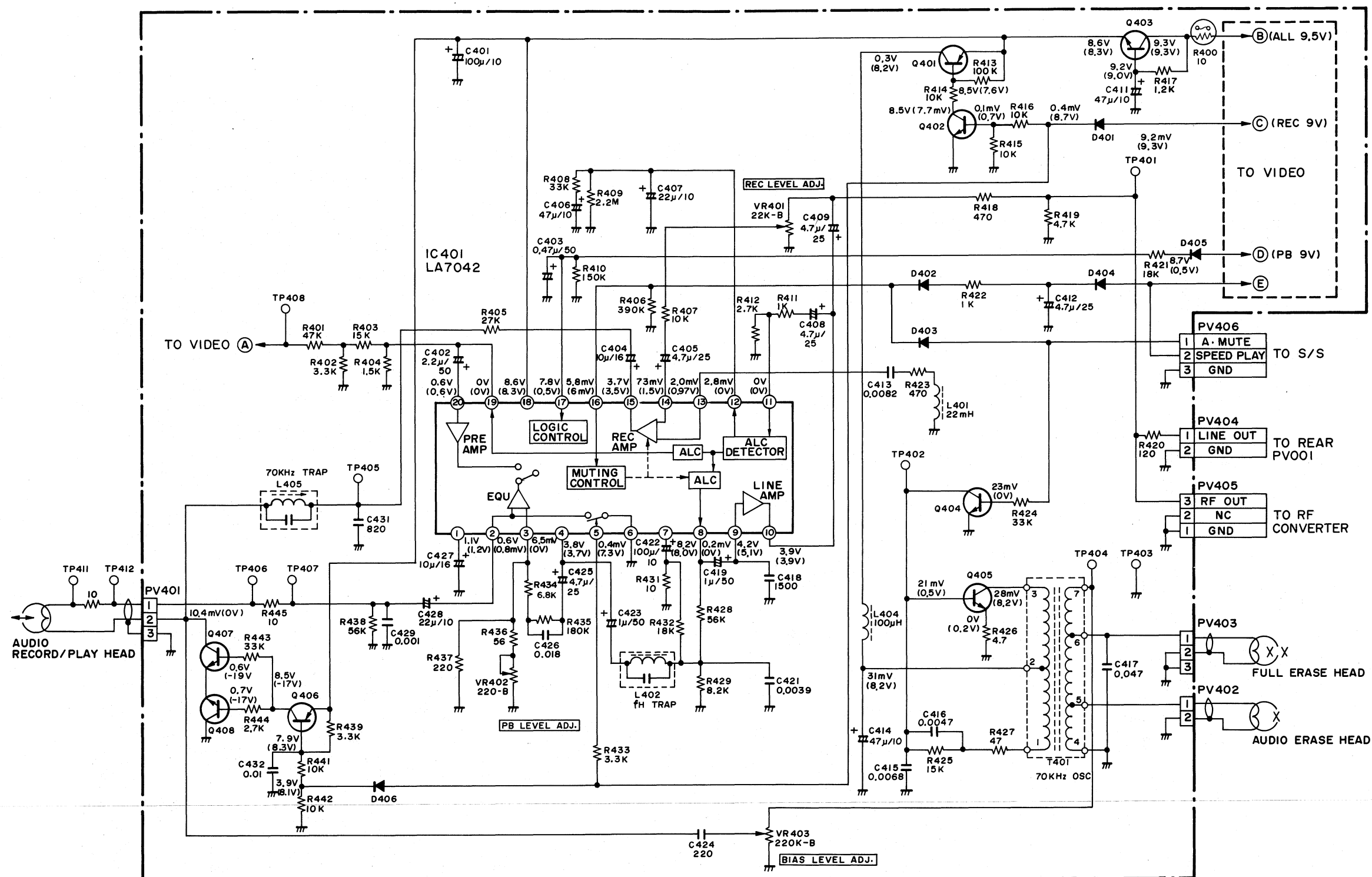


VIDEO CIRCUIT DIAGRAM



NOTE:
All voltage are in **PLAY** mode unless
otherwise noted.
()=RECORD mode

AUDIO CIRCUIT DIAGRAM

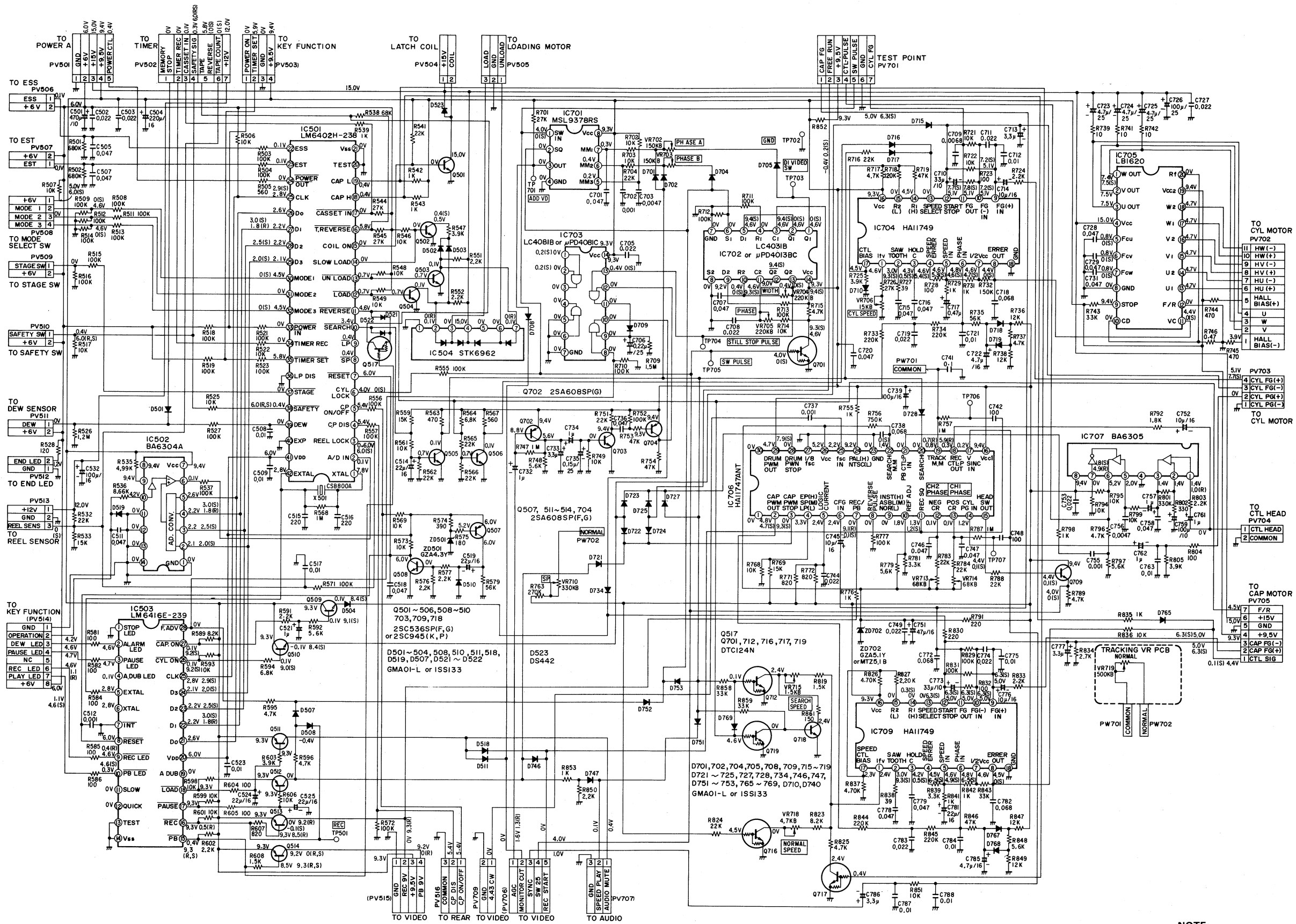


- Q401 ----- 2SA608SP (F, G)
 Q402, Q404 --- 2SC536SP (F, G) or 2SC945 (K, P)
 Q403, Q405 --- 2SD734 (F, G)
 Q406 ----- 2SA1016 (F, G)
 Q407, Q408 --- 2SC1845
 D401 ~ D406 --- ISS133 or GMA01-L

All voltage are in PLAY mode unless otherwise noted.
 () = RECORD mode

D

SYSTEM CONTROL SERVO CIRCUIT DIAGRAM



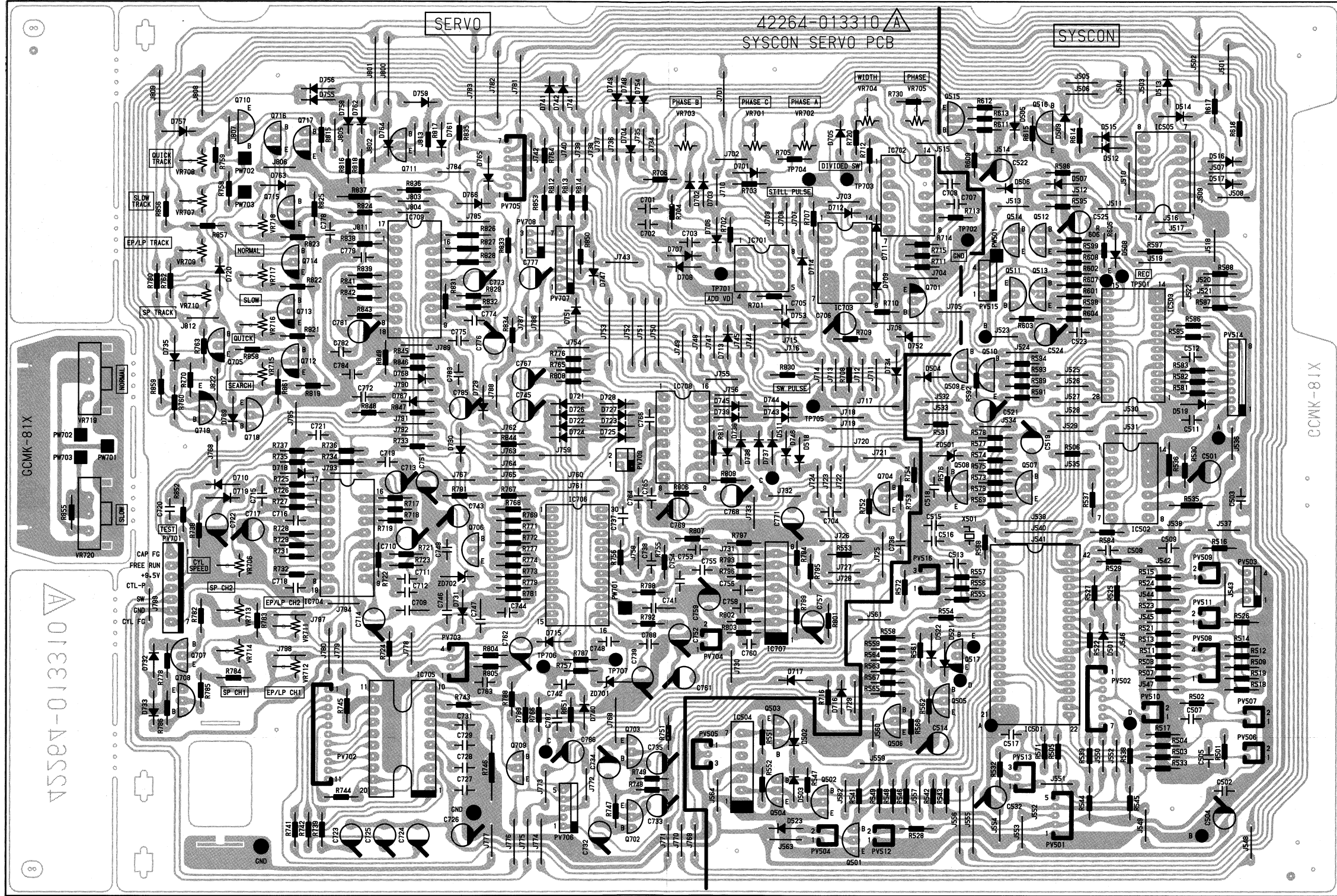
NOTE:

All voltage are in PLAY, RECORD and STOP mode unless otherwise noted.

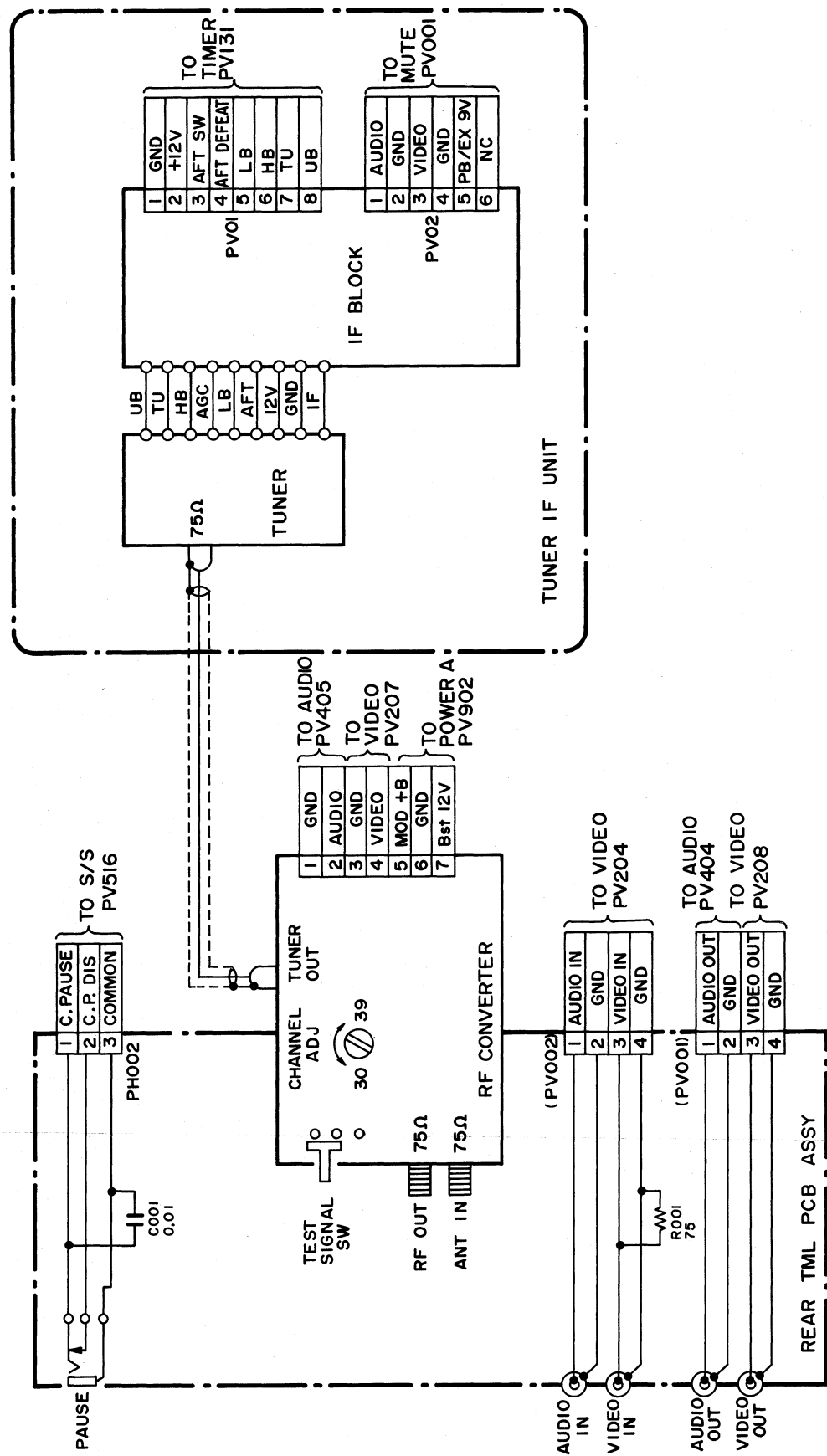
(R)=RECORD mode only

(S)=STOP mode only

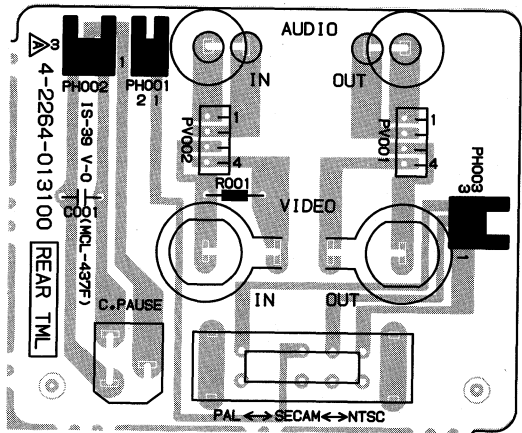
SYSTEM CONTROL SERVO CIRCUIT P.C.B.



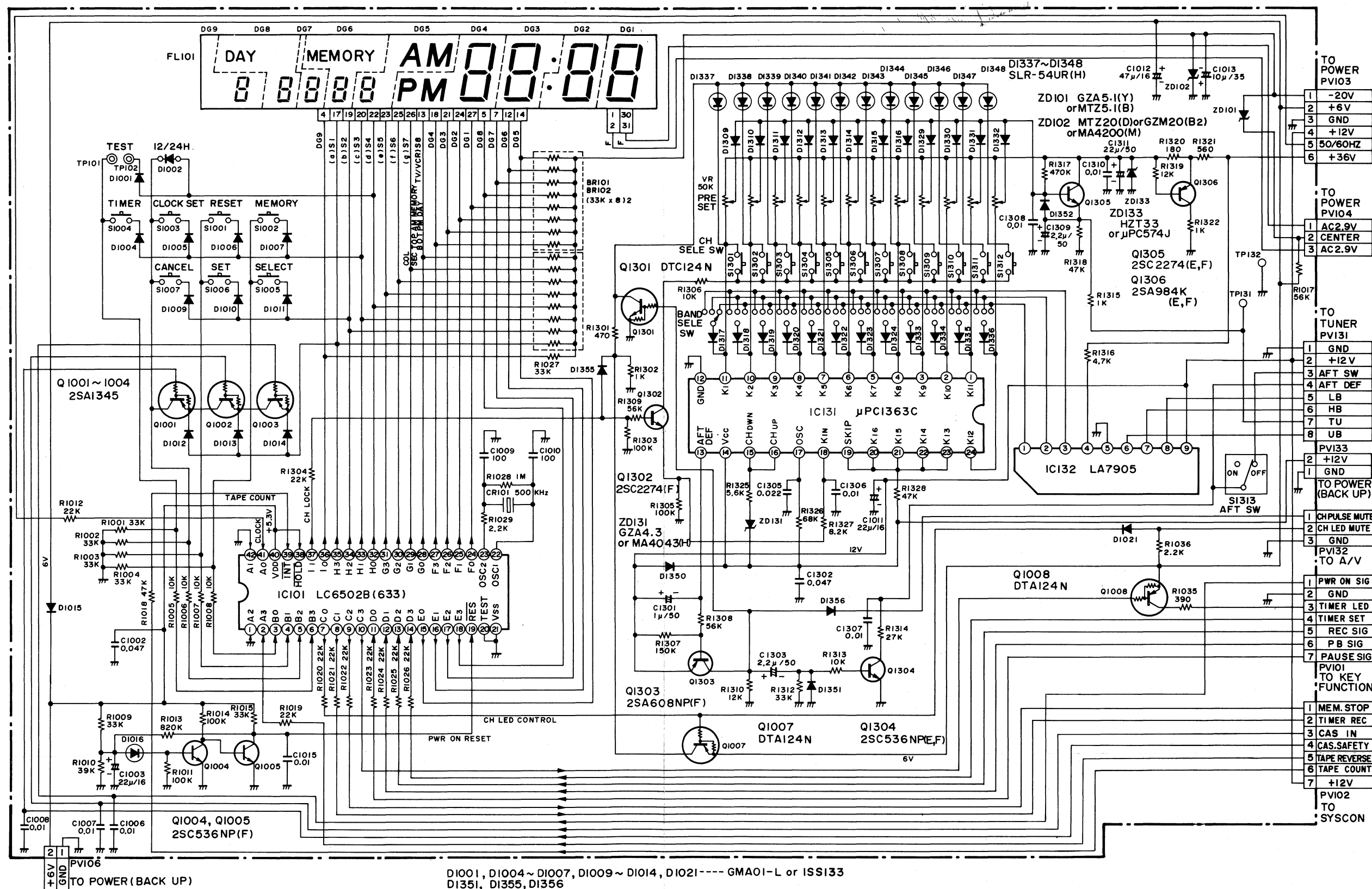
TUNER RF CONVERTER CIRCUIT DIAGRAM



REAR TERMINAL CIRCUIT P.C.B.



TIMER CIRCUIT DIAGRAM

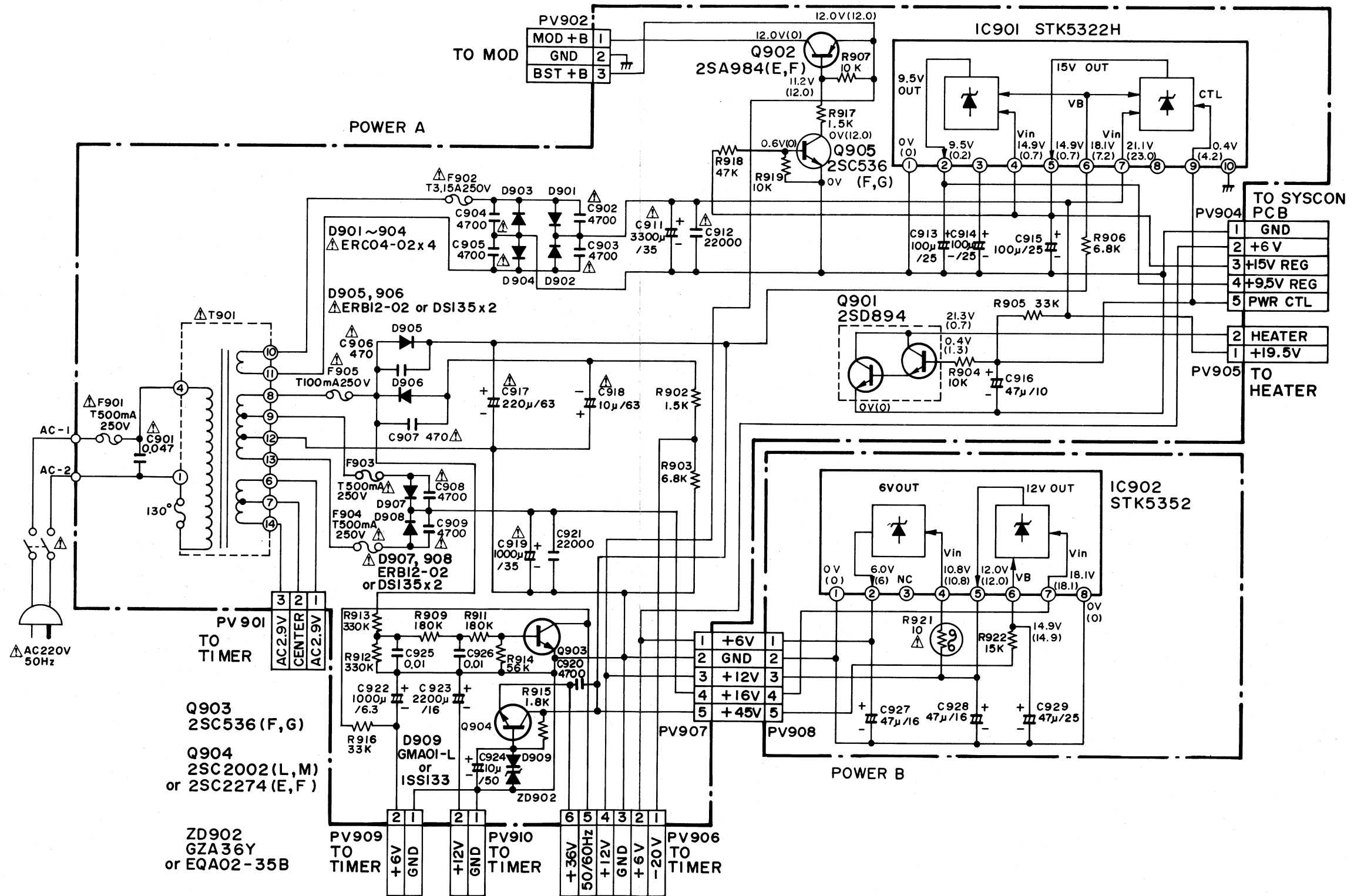


D1001, D1004~D1007, D1009~D1014, D1021---- GMA01-L or ISS133
 D1351, D1355, D1356
 D1016 ---- LTZ-G15
 D1015, D1350 ---- DS135E or ERB12-01
 D1352, D1309~D1324, D1329~D1336 ---- GMA01 or ISS131

TIMER CIRCUIT P.C.B.



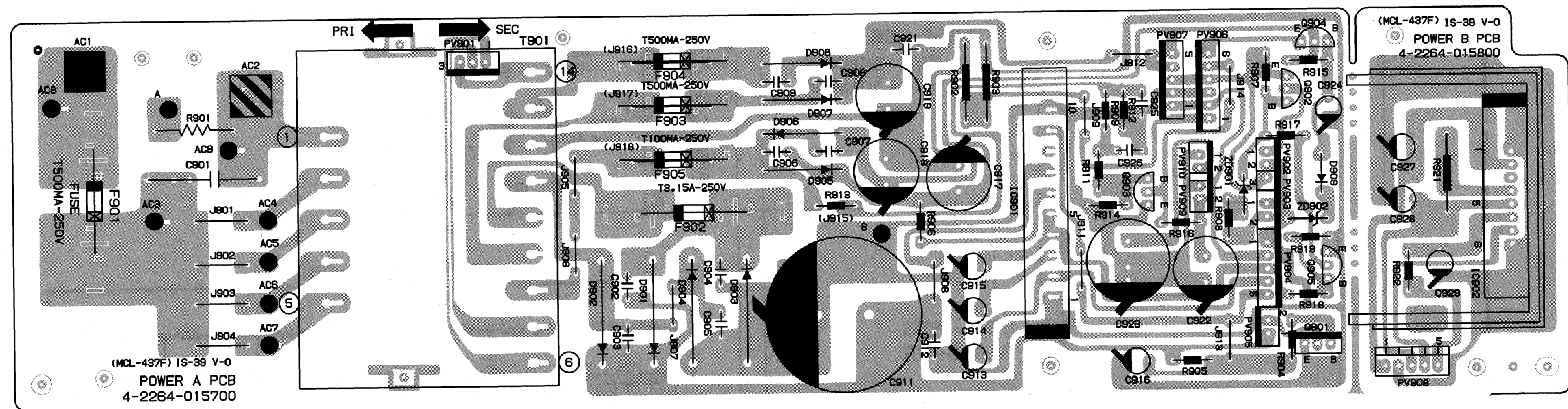
POWER CIRCUIT DIAGRAM



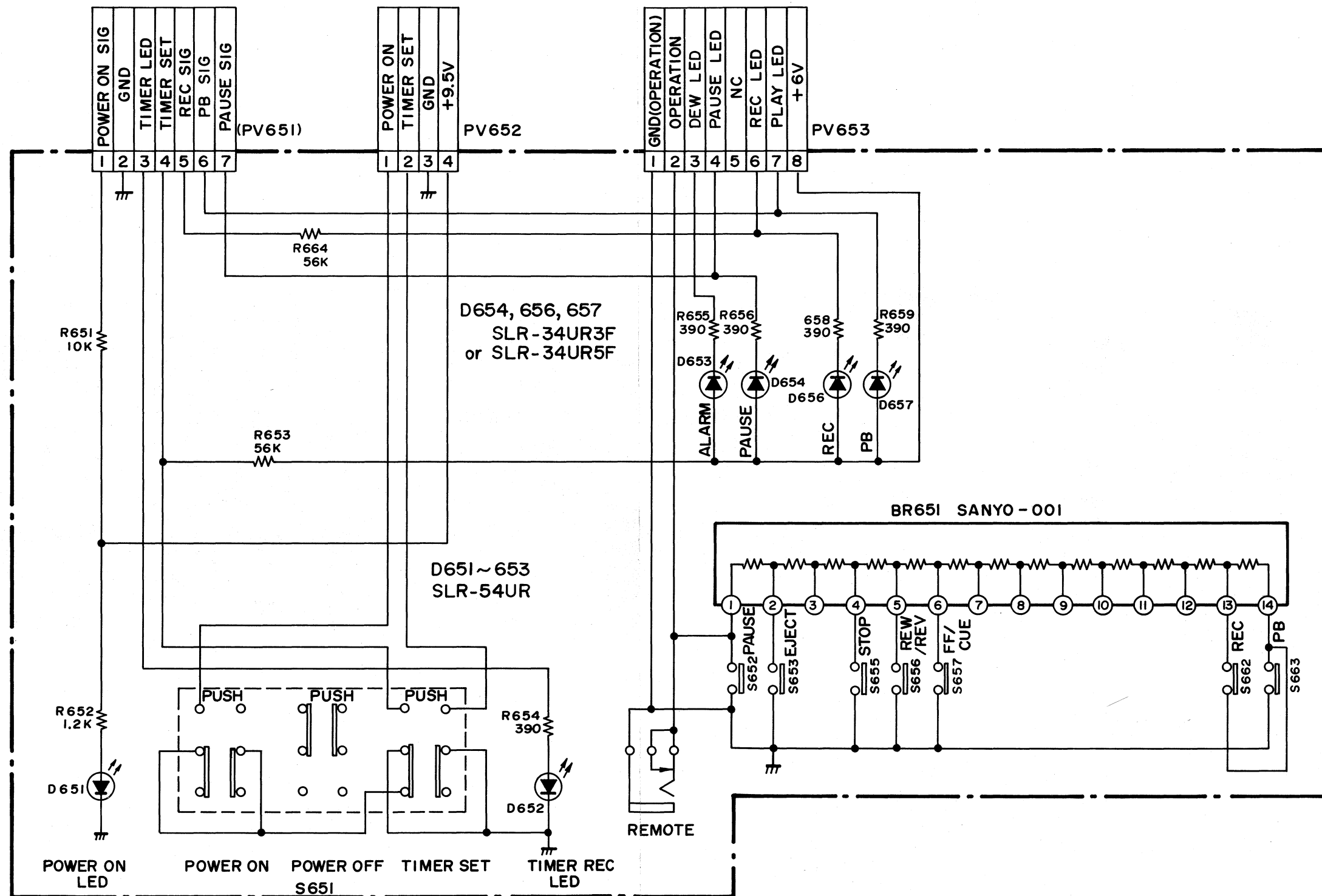
NOTES:

All voltage are in PLAY, RECORD and STOP mode unless otherwise noted.

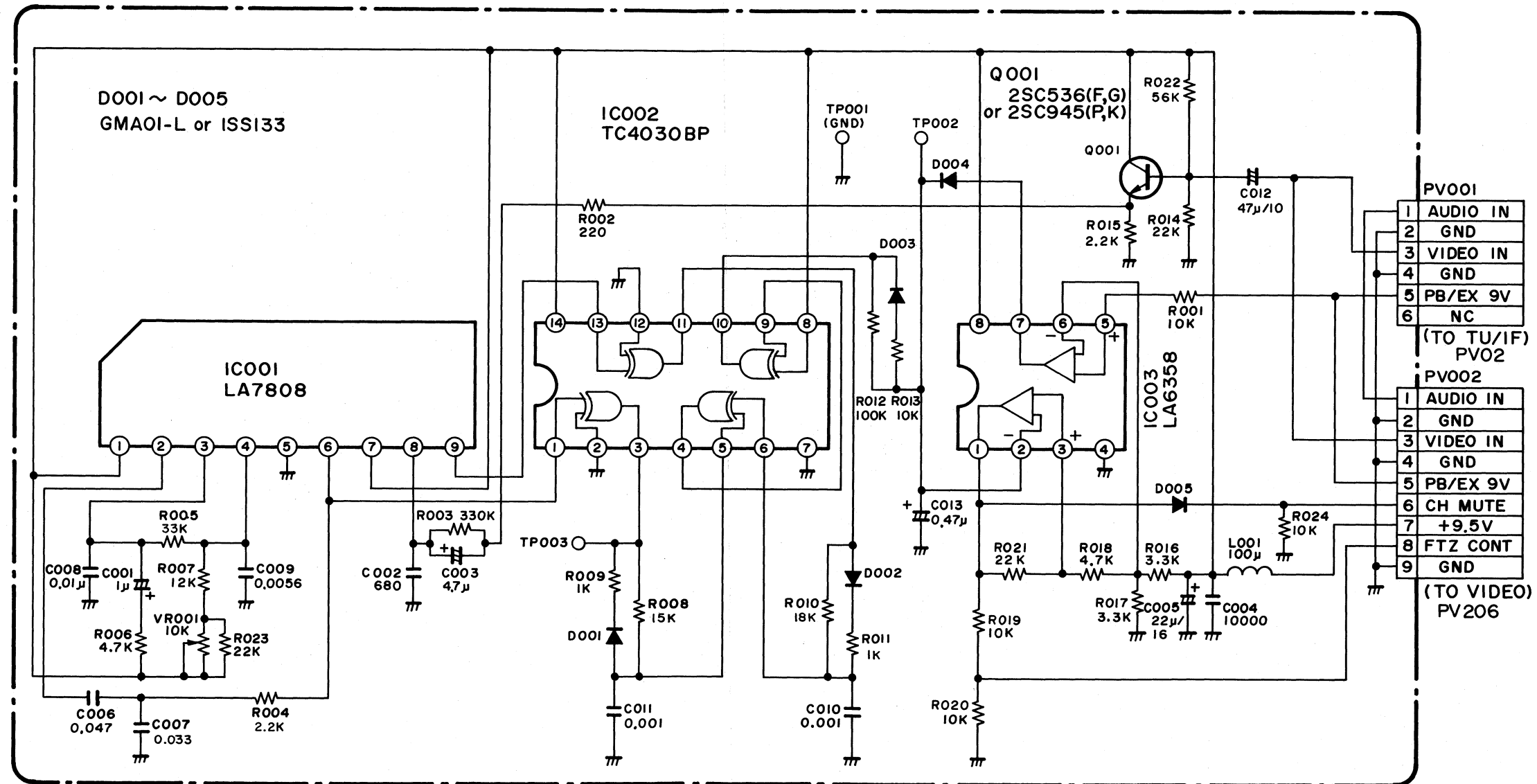
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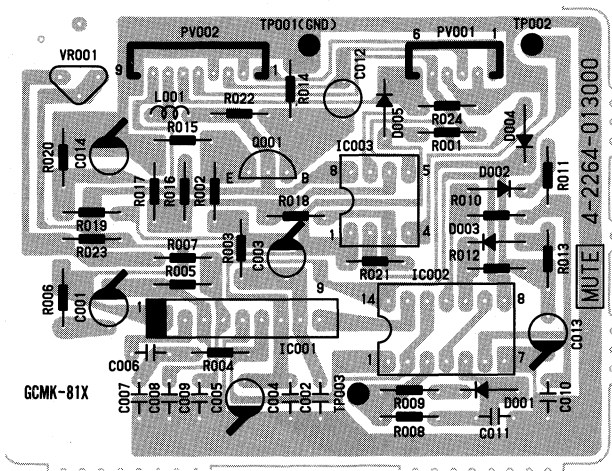
KEY FUNCTION CIRCUIT DIAGRAM



MUTE CIRCUIT DIAGRAM



MUTE CIRCUIT P.C.B.



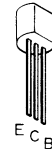
TERMINAL VIEW



2SD894

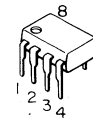


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2SC536SP

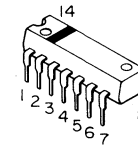


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2SC2002

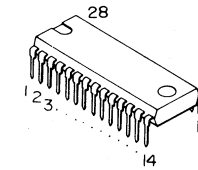
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DTA144N
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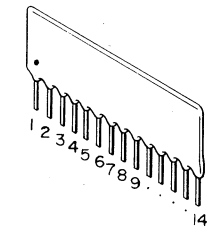
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LA6358



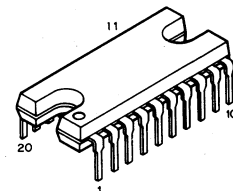
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LC4013BC
LC4081B
μPD4011BC
μPD4081C
TC4030



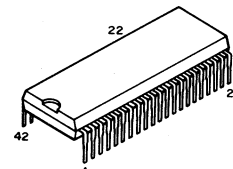
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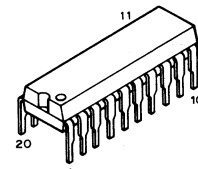
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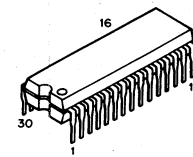
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LC6502B
LM6402



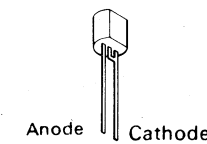
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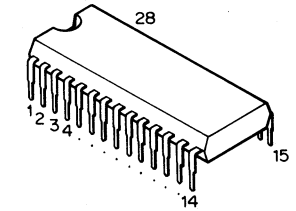
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HA11781AN



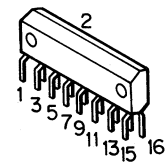
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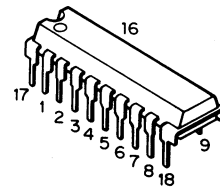
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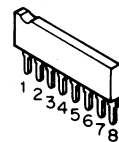
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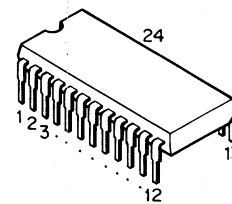
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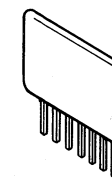
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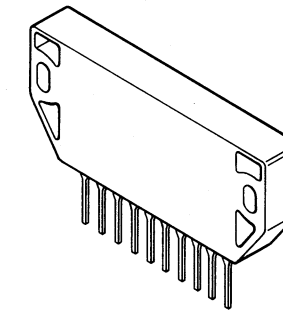
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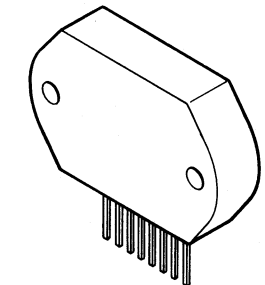
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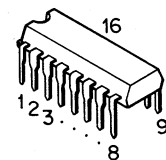
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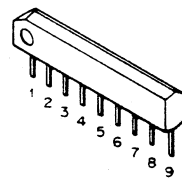
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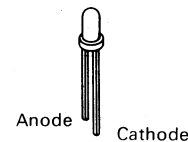
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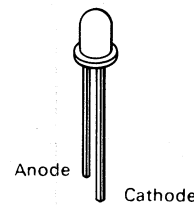
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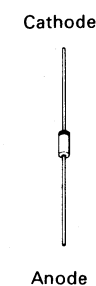
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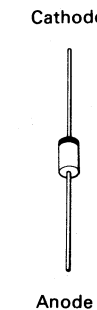
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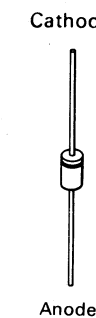
SLR54UR



DS442
GMA01
GMA01-L
1SS133
1SS131
EQA02-35B
GZA4.3Y
GZA5.1B
GZA5.1Y
GZA36Y
GZM6.2E-B2
GZM20
HZT33
LTZG15
MA4043-M
MA4360
MTZ5.1B
MTZ6.2-C
MTZ20



DS135E
DS135D
ERB12-02



ERCO4-02

NOTE:
E: Emitter C: Collector B: Base
1: VCC 2: GND 3: OUT